The American Journal of Clinical Medicine

Dependable Therapeutic Fact For Daily Use

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NOW FOR WORK

Summer is the doctor's play-time---then if ever! If he is wise he rests up a bit: goes fishing or hunting; gets into the mountains or the forests; takes a post-graduate course or a flying trip to "the other side." But after rest---WORK.

And what a splendid thing work is---if we put our hearts into it and become its masters instead of its slaves. Some one has said that hell consists of "losing interest in life." That should also mean that heaven, in a measure at least, consists in having plenty of work to do—work that we love and in which we are absorbed—and doing it.

Robert Browning once gave this advice: "Let a man contend to the uttermost for his life's set prize, be it what it will." Has any man a higher prize to contend for or a nobler work to do than the doctor?

So, let's "get busy," study, hustle, work with redoubled earnestness and greater joy because of the rest of the summer season---getting more out of our profession and putting more into it than ever before.

We're hustling some right here---hustling because we want to do our part to make the life of the American doctor really worth living; hustling because we want to add to his happiness and his income; hustling because we want to help inspire him to do ever greater things in working out his life's mission---the cure of disease.

Doing this to our uttermost, we all the more need, as we shall appreciate, such help and encouragement as you can and will give us. Teamwork wins.

By the way, Brother, after January 1st, '08, we are going to get for "Clinical Medicine" more nearly what it's worth, but in proportion to mechanical cost only. Now is your chance to pay up and renew at the old $1.50 price—to bring in your friends. After the date named it will be $2.00 to all. Better get busy. Yours and at least one more—the more the better—will be appreciated.

OCTOBER 1907

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THE DISPENSING QUESTION

Some of the old-time differences between doctors and druggists; a comparison of the conditions then and now. No reason for jealousy between the two professions. The folly of the legislative threat

DISPENSING physicians have more than once been the object of attack by druggists. Just now history is repeating itself. Both the American Pharmaceutical Association and the National Association of Retail Druggists are doing all they can to secure legislation to prevent physicians from dispensing their own medicines.

To read some of the editorials in the rabid drug journals one would think that all knowledge of medicine was to be found only in the profession of pharmacy, and that the conditions now are not much better than they were in 1600. Jeaffreson says of conditions in those days:

"Apothecaries prescribed their remedies on their own responsibility, without the countenance of a member of the College of Physicians. If they were threatened with censure or other punishment by a regular physician, they retorted by discontinuing to call him in to consultations. Jealousies soon sprang up. Starving graduates, with the diplomas of Oxford and Cambridge and the certificates of the College in their pockets, were embittered by having to trudge the pavements of London, and see the mean medicine-mixers (who had scarce scholarship enough to construct a Latin bill) dashing by in their carriages. Ere long the heart-burnings broke out in a paper warfare, as rancorous and disreputable as any squabble embalmed in literature. The scholars called the rich tradesmen thieves, swindlers, and unlettered blockheads. The rich tradesmen taunted the scholars with discontent, falsehood, and ignorance of everything except Latin and Greek.

"All men of enlightenment and sound scholarship took the side of the physicians. In the protracted dissensions between the physicians and the apothecaries Pope was a cordial supporter of the former. When in the 'Essay on Criticism' he accused the penny-a-liner critics of acquiring their slender knowledge of the poetic art from the poets they assailed, he compared them to apothecaries whose scientific information was pilfered from the prescriptions they were required to dispense.

"'Then Criticism the Muse's handmaid prov'd,
To dress her charms and make her more beloved;
But following wits from that intention strayed;
Who could not win the mistress, woo'd the maid;

"'Against the poets their own arms they turned,
Sure to hate most the men from whom they learn'd.
So modern 'Pothecaries, taught the art
By Doctor's bills to play the Doctor's part
Bold in the practice of mistaken rules,
Prescribe, apply, and call their masters fools.''

Conditions have changed since then. Both doctors and druggists are better qualified and should be more liberal. It is a pity that in 1907 there should be so much jealousy between the two professions.

It is fair to assume that any physician who is qualified to practise medicine at all is competent to dispense such medicines at the bedside in emergency cases or at his office for more chronic cases as he thinks indicated. The right to furnish medicines to his patients is inherent in the physician, and while it is improbable that any legislature would attempt to deprive him of that right or that any court would sustain any such attempt if made, it nevertheless behooves every intelligent physician to be alert and use his influence to prevent any such unjust legislation.

In a recent editorial in *The Western Druggist*, commenting on an article by B. L. Maltbie in *The Medical World*, is the following: "If by the statement that 'the majority of physicians are obliged through force of circumstances to dispense,' the doctor refers to emergency or bedside dispensing, no one is disposed to dispute it and no one has any objection to this necessary dispensing. In fact, the right of the physician to do this is so axiomatic that it needs no demonstration and has never been disputed."

Now if a doctor has the right and is competent to dispense at the bedside in emergency and desperate cases, he is certainly competent to dispense for the less acutely or dangerously ill.

This same editorial insults the dispensing doctor by saying: "The proportion of incompetent druggists is no greater, and probably not nearly so great, than the proportion of incompetent physicians." "It is usually the less competent physician who practises dispensing." The "dispensing physician is constantly giving the 'next best thing' when the drug he knows the patient should have is not in his necessarily small stock."

We should resent these constant attacks on the medical profession and particularly the insinuations that the country doctor or the one who dispenses his medicines is incompetent. The best all around doctors in this country today are general practicians and many of them in small towns. Many of them are too busy to attend medical societies, write articles for medical journals, and keep themselves in the limelight, as some of our would-be medical leaders are doing, but they can give the average "professor" or medical author "cards and spades" when it comes to practising general medicine and surgery. Do you suppose that these country doctors—the backbone of the medical profession—will mildly submit to any legislation which will compel them to give up dispensing medicines to their patients whenever they think best. Well, hardly! He will dispense medicines or write prescriptions as it pleases him.

As for keeping in stock a sufficient supply of medicine, the physician can keep an assortment sufficient for his needs, as well as the druggist. By using active principles he can keep in his medicine-chest all the drugs he will need in a year's practice. Should he desire something for his patient he hasn't in stock he can write a prescription.

We have no quarrel with the druggists, but they must remember that a physician's business is of such a nature that he must be unhampered and free to do what he thinks is for the best interest of his patients.

Keep your eyes and ears open, Doctor, and use your influence to prevent any legislation toward forcing you to use a prescription pad for any of your patients who need medicines.

THINGS JAPANESE

People who get "dippy" over the Japanese, pro or con, should leave the newspapers and correct their ideas from the reports made by experts who are cool, critical and just, like that of Navy-Surgeon Braisted on the naval medical and sanitary features of the Russo-Japanese war. This report is printed by the Government, and, we presume, can be had for a nominal price on application. It

is an excellent presentation, and corrective of the wild and misleading tales of the space-filler and sensation monger.

In this connection we must say that not all of the newspaper stories are thus objectionable. Recently we noted a sensible comment in a daily, on the yarns about Japanese spies about our forts and on our warships. These men, like every Japanese in a foreign land, busied themselves making drawings and plans for transmission to their government. The information obtained was not secret and could have been secured openly for the asking. Educated Japanese officers seeking employment on our vessels were recognized, and their anxiety to secure information was witnessed with amusement. The plans of warships are public property, and no details are kept close to be ferreted cut only by spying. Every gun, every inch of armor plating, is described in the official reports that are accessible to anybody who feels sufficient interest to obtain them.

Surgeon Braisted credits Japan with the creation of her fine navy, and its medical corps, a growth of about forty years; but he does not go into raptures over them. The Japs themselves hear with amazement the comments of silly enthusiasts like one quoted, who exhausts his superlatives over "one of the poorest, dirtiest, and illy equipped of Japanese hospitals." Braisted says: "There are many defects of organization, construction and equipment, of which the Japanese are perfectly aware and say nothing about to foreigners, and which they are earnestly striving to correct."

Much of their success is to be credited to their habits of obedience and discipline. They are told to obey the laws of hygiene, and they do it, where an American will experiment with disobedience. "But there is little else for us to learn from the Japanese at this time."

The Japanese are especially fond of surgery, mostly of emergencies, doing little abdominal work. "In pathology and bacteriology they probably excel us."

The medical part of their work is less developed; the dispensaries are supplied with the usual drugs, but they take little interest in this department. Their hospital ships are simply merchant vessels made to answer, or built with the purpose of such conversion when the war-needs pass. There are no special features for imitation in plan or equipment, but their regulation is exceptionally wise. The chief surgeon is the captain, the master of the crew being not a commissioned officer of the war navy but a merchant skipper, who keeps up the discipline of his crew and navigates the ship. In all other respects he is under the orders of the surgeon. Only male nurses are employed on the ships, but in the hospitals ashore female Red Cross nurses give service that meets unqualified praise. "On the whole these ships are efficient. They did not impress me as favorably as I had hoped. They seemed less spacious than expected, and the finish of surfaces, sanitary arrangements, etc., were not as well looked after as it would seem possible." "Our own hospital ship, Relief, is to my mind far superior."

Many interesting details as to diet are given, which we can not here quote. Wooden bath tubs seem highly objectionable to modern eyes, but these are what the Japanese have been using.

Typhoid is not prevalent but a few cases of typhus occur and treatment is symptomatic, strychnine being a favorite tonic; the baths are not used. Pneumonia is occasionally seen, and tuberculosis is quite frequent and apparently increasing. Venereal disease is common, especially gonorrhea. Kakke is common in the army but not in the navy. Opinion seems to be tending to the microbic theory of its causation. Very little malaria is found in Japan. Bacillary dysentery is common; diphtheria, cerebrospinal meningitis, smallpox and erysipelas are rare.

In surgery the author noted the prevalence of skull wounds and a remarkable immunity of the abdomen from wounds. "But one appendicitis operation. The Japanese think we are daft on the subject and always mention it with a smile."

Preventive medicine is well to the front. "Vaccination is general and has proved wonderfully efficacious." In dysentery Shiga's serum is employed with success, and

prophylactic inoculations show hopeful results. In typhoid fever, tuberculosis, erysipelas, plague (no cases), cholera, tetanus, diphtheria and leprosy, sera and antitoxins are studied.

Surgeon Braisted was fortunate in being present when the wounded from the great sea fight were brought in to the hospital. He testifies to the skill and unwearied perseverance of the Japanese surgeons, in attending to the suffering of their own and the Russian fleet. If anything, even greater care was given the latter. Our observer comments favorably on the quality and abundant supply of dressings and other necessaries. First-aid dressings were successfully applied by the Japanese, but the conditions on the Russian ships did not admit of this in general.

These notes will give an idea of the report and possibly correct some wrong impressions.

To live in the Idea means treating the impossible as though it were possible. The same thing applies to Character; if both an Idea and a Character come together, they give rise to events that fill the world with amazement for thousands of years. —Goethe.

RELIGIOUS JOURNALISM AND QUACKERY

Collier's Weekly, which has done so much to uncover the "Great American Fraud," in its August 3 issue has a surprising exposure of the complicity of the religious press of this country in its perpetuation, by Samuel Hopkins Adams. In spite of all that has appeared in such journals as *Collier's*, *The Ladies Home Journal*, and others of the class which are doing so much to "clean up" the press of America, the religious periodicals go bravely (?) on for dirty dollars, apparently entirely oblivious of this movement, fighting Sin and the Giant Rum, but recommending through their advertising pages the vilest and most unscrupulous quacks and the rottenest and rankest of patent-medicine booze, compared with which clean whisky is "out of sight." No denomination is free from the taint. They are all guilty with the exception of the Christian science and certain Quaker organs. Protestant and Catholic, Jew and Gentile—all are holding out eager hands for this blood-money. True, there are a few religious journals, like *The New York Christian Advocate*, which are clean—but how few!

Get this copy of *Collier's*. Place it on your reception room table where everyone can read it. Show your pastor the frauds your church paper is advertising. Use your influence for the purification of the religious press, which should be a power for good to all men, instead of a snare for the ignorant and unwary, leading them through these dope presentations, through self-medication, straight to the saloon, the dive and the brothel—to hell itself.

WALKING TYPHOID FEVER

Not long ago a remarkable case of walking typhoid fever was causing a good deal of excitement in New York City. The case was that of a cook who had typhoid fever six years ago. From this she recovered, but since that time she carried the disease to every household in which she has been employed. At least twenty-five persons have been infected by this woman, whose feces still contain active typhoid bacilli.

In all probability this is not by any means a solitary case. Some time ago our laboratory detected typhoid bacilli in the feces of a physician who had been affected with that disease three years previously. It would be an exceedingly instructive investigation if similar examinations were made in a series of cases at intervals of a year. We might thus ascertain how long it requires for the disappearance of these organisms or whether they ever disappear. Incidentally we might get a line on the practical value of various intestinal antiseptics.

Hitherto these agents have been employed on the basis of the unquestionable benefits following their judicious administration. We may not know exactly in what manner these remedies act, but that does not alter

the fact of their acting beneficially. There is a consensus of opinion among those who have mastered their application that completely emptying the alimentary canal and so disinfecting it that all unpleasant odor is extinguished in the stools means a reduction in the total symptom-complex amounting to over thirty percent. This usually reduces the case to the category of simple, benign, or even abortive forms.

At first the easy explanation was given that these remedies killed the germs. We know now that pathologic problems are by no means so simple. It may be that these agents prevent the multiplication of germs, or interfere with their elaboration of toxins, or neutralize the latter, or prevent their absorption into the blood, or simply act against the reinforcing microorganisms of other forms which swarm into the breaches effected by the typhoid bacilli. It is much to be desired that the exact action of these remedies should be fixed, especially as many in the profession seem unable to comprehend that the fact may exist even if its explanation be wanting.

A singular instance of jumping at false conclusions may be noted in nearly every article on typhoid fever appearing in the medical journals. It is now known that the specific typhoid bacilli appear in the blood even as early as the incubation period. From this is deduced the wholly unwarrantable conclusion that intestinal antiseptics are useless. Nevertheless, it has been shown recently that the bacilli disappear from the blood about the time of defervescence, the natural protective powers of the body being sufficient for the destruction of all such microorganisms found in the circulation. In the intestinal canal we have a different state of affairs. To a certain extent the contents of this canal may be considered really outside of the body. They do not form a part of the living body and are beyond the reach of the circulation. While they are acted upon by the digestive fluids, it is in a strictly chemical manner and not through a directly vital process. The action occurring in the intestines, therefore, may be compared to that which goes on in the chemist's test-tube.

Nobody can possibly note the odor of characteristic, undisinfected typhoid stools without being willing to acknowledge that their toxicity is probably extreme. Fever suspends the secretions of the digestive canal and its glands. Whatever disinfecting action may be ascribed to these fluids is therefore lessened during fever. Bacterial action goes on unchecked and virulent toxins are the result. Absorption is vastly increased by the great loss of fluids from the body. These toxic substances, swarming with virulent microorganisms of many kinds, are in direct contact with inflamed or even ulcerated surfaces in the intestines. Can this be a matter of indifference? Would you use such stools to dress an ulcer on the skin?

Altogether I look upon this New York case as one of the most striking evidences yet offered as to the importance of the intestinal canal in this disease, and the necessity of disinfecting it as thoroughly as our means permit.

Write on your doors the saying wise and old,
"Be bold! Be bold!" and everywhere—"Be bold;
Be not too bold!" Yet better the excess
Than the defect; better the more than less:
Better like Hector in the field to die,
Than like a perfumed Paris turn and fly.
—Longfellow.

DRUG-PLANT CULTURE

Albert Schneider, in *The Pacific Pharmacist*, suggests that before any attempt at drug culture is made the following questions should be carefully considered—and we heartily agree:

Is there an adequate market demand for the drug?

Is the market demand quite constant or does it fluctuate greatly?

Has it been demonstrated that the plant will thrive in the particular locality in which it is to be grown?

Are the soil and climate well suited to the plant to be grown?

Is the necessary labor available?

Is the necessary machinery available?

Must artificial heat be employed in drying?

On how large a scale must cultivation be undertaken to make the venture reasonably profitable under average conditions of yield and of market demand and value?

How much capital will be required to undertake the venture properly and profitably?

Will there be strong competition and what influence will this have upon launching the enterprise and upon the net results?

Will it be advisable also to become manufacturer?

Is it intended to grow the drug for the retail or wholesale market, or both?

What are the enemies (pests, animal and vegetable) of the plant? What are the remedies?

How can the yield per acre be increased?

How can the percentage of active constituents be increased?

There is an hour in each man's life appointed
To make his happiness, if then he seize it.
—Beaumont and Fletcher.

CONSTRUCTIVE OR DESTRUCTIVE CRITICISM?

If there is one spirit more than any other characteristic of the age we live in, it is that which is now impelling men of all classes of society, doing all kinds of work, to seek *the truth*. This is good, if the seeker is not so afflicted with intellectual or moral strabismus that he can see and understand the evil only. Unfortunately, too often the destructive sense has been developed at the expense of the constructive. The ideal type of criticism seems to us expressed in the following thoughtful article by Waldo Podray Warren, clipped from *The Chicago Record-Herald:*

The spirit of criticism seems to be changing for the better. There is less of the destructive and more of the constructive variety than formerly. The constructive critic is being welcomed on every hand where once he might have been regarded as a meddler. The destructive critic, the man who talks everything down from habit rather than from reason, and who throws cold water on every feeble and immature effort at original thought and work, is coming to be recognized as a blighting influence. His words have less weight than heretofore because men are learning that whatever comes from such a mind has little value, either for guidance or for serious consideration.

Men are learning, too, that there are many viewpoints from which a thing may be considered; that what appears right to one man may appear wrong when viewed through the experience of another. In this spirit workers are keen to get a sidelight on their work, and are willing to put their theories to the test of another's judgment before spending time and money in carrying them out. The critic who can be depended on to give a fair view of the matter from a different standpoint, who has an eye for beauties as well as for defects, is in demand in almost every line of business. This spirit should become universal, introducing an era of improvement.

There can be but one legitimate object for criticism, and that is to make things better. Defects should be recognized and pointed out—not simply because they are defects, but in order that the good may be encouraged and have larger scope for development. That is the essential thing. The best motto we can think of for the critic is

"To look up and not down,
To look forward and not back,
To look out and not in—and
To lend a hand."

The work we are doing is not perfect. No one knows that better than we do. But it is a great constructive work just the same, with a great and we believe, a noble, object in view. We want to strengthen it, improve it, in every way possible, and we shall welcome your help to that end. Instead of grumbling about our defects, why not take hold with us and "lend a hand?"

THE PROGRESS OF PROHIBITION

It was in 1846 that the first law to prohibit the manufacture and sale of intoxicating liquors was passed by the legislature of the State of Maine. It was defective and in 1851 was reenacted in a form capable of being enforced. This was the "Maine law," socalled, which was extensively copied by other states. Some twenty-three states first and last having enacted more or less similar laws. In spite of this there are at present only three northern states, Maine, Kansas and North Dakota, where there is at the present time even half-way effective prohibition.

This apparent failure and "infirmity of purpose," however, is undoubtedly due far more to the unceasing watchfulness of the liquor interests than to any defects in the principle at stake. There can be no doubt that wherever these prohibitory laws have been even passably enforced they have done much to arrest the production of crime and to prevent poverty and disease.

But while the fight against this debasing traffic has languished in the North it is significant that in the South it has advanced to the forefront. The State Dispensary system in South Carolina and the local-option movement in the other southern states apparently have been slowly but surely driving the saloon to the wall all over this part of our country. In this entire section there is probably practical prohibition of the liquor traffic among 80 percent of the population. Furthermore, the local-option movement seems to be but a stepping stone to complete state prohibition. First of the southern states to advance to this stage is the State of Georgia which by an overwhelming vote of both of its legislative branches has just passed a prohibitory law, which has now received the assent of the Governor.

In the South the fight against alcoholism takes on a somewhat different phase from what it does in the North. Here it is a part of the great negro question, and it is a fine tribute to southern manhood that it realizes its moral responsibility for a race which it believes, and properly (and so does everyone but a senseless fanatic), inferior. To safeguard the colored man from physical and moral deterioration it is necessary to remove this potent influence for evil, which is doing so much to demoralize him and drag him down. It is not of course intended to imply that the colored man is the only one in the South who needs protection against that insidious enemy of our race—alcohol—nor that our southern brethren so feel. But it is an important factor in the struggle, because of the susceptibility of the weaker race to all poisons which stimulate the too-responsive sex- and sense-centers.

Undoubtedly Georgia's example will be followed by other southern states. Newspaper reports tell us that Delaware is on the eve of such legislation, while A. J. McKelway in *The Outlook*, August 31, says:

"In Mississippi only a dozen places now sell liquor. Meridian, with a population of 25,000, boasts an empty jail. Jackson, the capital, has long had prohibition. In Tennessee only Chattanooga, Memphis and Nashville remain as cities that license the sale of liquor. The Alabama House of Representatives, stimulated by Georgia's example, passed a state prohibitory bill by by an overwhelming vote, though there was not left time enough in the short session to enact it into law. South Carolina forbids the saloon in its constitution and only a few local dispensaries now remain. North Carolina is practically certain to adopt state prohibition at the next session of the legislature, and Governor Glenn has already made that the issue in his campaign for the United States Senate. Even Texas and Kentucky have a large majority of their counties 'dry' under local option, and under our peculiar circumstances, with the presence of the negro population, local option will lead inevitably to state prohibition."

Whatever may be the political affiliations of the readers of CLINICAL MEDICINE, we believe that this movement should appeal to them. Alcohol is probably the greatest of all breeders of crime, disease, degeneracy and poverty. It not only robs the nation of an enormous amount of wealth, but in return it contributes nothing to its strength.

"Can you name one good thing," says Robert J. Burdette, "the saloon has done for humanity—one good thing—one instance in which it has brought forth fruits unto righteousness—one influence sweet and healthful, and pure, gracious and beautiful, which will linger lovingly in the memory of man, when you have buried the rum power, to make them say, 'God bless the saloon for the good it did?' Search through the history of this hateful thing, and read one page over which some mother can bow her grateful head and thank God for all

the saloon did for her boy. There is no such record. All its history is written in tears and blood, and smears of shame and stains of crime and dark blots of disgrace."

Is it not the duty of the members of our profession to take an active part in fighting this pernicious traffic? *The saloon is distinctly the doctor's enemy because it impoverishes so many people and absorbs so much of the wealth of the country, a considerable proportion of which is legitimately the doctor's share.* It does its work not only through the open sale of intoxicants, but insidiously by fostering the patent-medicine industry; such vile stuff as peruna and other thinly veiled intoxicants in the disguise of medicine eventually lead down to open debauchery and degradation while robbing the doctor.

Alcohol is not a necessity, even from a medicinal point of view; as a remedy it is a thing to be dreaded and distrusted. There is no physical condition demanding a remedy, and where alcohol might be given, in which the materia medica does not provide something better. Why then should the physician foster it, or even countenance its use? Our profession, which is intrusted with the guardianship of the health of the people, should be a unit in fighting this deadly, devastating traffic. Down with it —north and south!

Ven a man is anxious to keep your secret keep him anxious. —Dinkelspiel

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"WHY HE QUIT"

Now that the fishing season is happily drawing to a close those of us who love to tease the finny denizens of the deep from their watery retreats may be pardoned if we moralize thereon. And that is the reason why we reprint the following little story from one of the current newspapers:

"I wouldn't feel too bad about it if I was you," said the elderly observer in a tone of mild reproof, "There's plenty of others in the lake an' cussin' won't help your chances with 'em."

"But did you see him?" demanded the young fisherman, excitedly. "And look at the shank o' that hook! Snapped it right off!"

"It's too bad," said the elderly man, consolingly. "He certainly must have been a whale to have done that. You've got more hooks, though, haven't you?"

"Sure!" said the young fisherman. "I had him almost up to the pier. I knew as soon as I got the jerk that it was a big one and I was handling him careful. What do you think o' that now? Wouldn't it jar you? Wouldn't it make you sick?"

"Put another hook on and try it again," counseled the elderly onlooker.

"What's the use?" said the young man, disgustedly, and still staring at the broken hook. "Say, but he was a peach! That's the biggest ever swam up to this pier. I'll bet you. Look at my hand where he pulled the line through it. Darn the consarned, everlasting luck! Now, ain't that my luck! I've been here ever since sun-up and haven't had a bite to speak of. Then I put on that big hook and a minnie just for luck and blame it! If I'd just got him a foot nearer I'd have had him."

"You aren't going to quit fishing just because of that, are you?"

"Sure," answered the young fisherman. "What's the use o' fishin' here all day? If I'd got that one I'd have took him home an' cooked him for breakfast. I betcher he would have tasted good broiled. He was a whitefish, all right. He wasn't no herring. Once in a while a feller gets a herring, but that don't happen often. He was as big as three herrings. I just caught a sight of him as he swam alongside and his side was as wide as that cigar box—wider. I'd sooner have lost a $5 bill than lost that fish. Maybe if I'd have pulled in quicker I'd have got him all right. I slacked up just as he came up close. He's off in the middle of the lake by this time with my hook. I feel like kicking myself."

"That's no use," said the elderly man. "If you'd pulled him in quicker you might have lost him quicker. It's no use thinking what you might have done. He's gone and that's all there is to it. If I were you I'd try to think it was just because the hook was poor that he broke it and that he wasn't such an extra-sized one after all. I'd call it a dogfish and let it go at that. Anyway, I wouldn't quit fishing. The next time you throw in your hook you might land a better one yet."

"Not a better one than that," said the young man. "You didn't see it and you didn't feel it pull or you wouldn't try to tell me that."

"No," acknowledged the elderly man. "I guess you're right after all. It wouldn't be a better one if you landed it. It's always the fish that get away that are the best and the biggest—always. You'll catch a hundred big fish in course of time, and forget all about 'em, but you'll never forget the one that broke your hook, will you?"

"Well, I'm going," said the young fisherman, who had put up his tackle. "I've got enough. So long!"

I wonder why it is that so many doctors like to fish? Is it because so many of us go angling through life for success—which means the saving of human life? The profession of medicine is no place for a

quitter. Fail once—perhaps. But give up? Never! Let us have good bait, the best of hooks and—keep right on fishing till we land the fish.

I have lived to know that the great secret of human happiness is this: Never suffer your energies to stagnate! The old adage of "too many irons in the fire" contains an untruth—you cannot have too many—poker, tongs and all, keep them going.

—AdamClark

WHY USE ALKALOIDS?

We have been requested to put in succinct form the principal reasons for the physician's preference of the active principles rather than the older forms of medicines.

Somewhere we have compared the old galenics to the ax utilized by our remote ancestor in the paleolithic age. It was a very good ax, from his point of view, and he might well be pardoned for the profound conviction he possessed that there was nothing better possible in the way of axes than his trusty flint. But this is scarcely just to the modern galenic tincture and extract, which correspond rather to the polished product of the neolithic period, the crude unworked roots, barks and herbs representing the earlier weapons.

With the smelting of metallic ores came a new era in the manufacture of weapons and implements. While the stone ax may have answered for the uses to which it was put, the development of metallic axes opened a new field for its utility, and men found they could, with these bronze and steel axes, accomplish tasks they could not have attempted with the cruder tools. We are confident, however, that the vast majority of paleolithic and neolithic men refused to have anything to do with the new-fangled metallic axes, and only as the old died off and the younger generations replaced them did the innovation come into general use. And yet—we repeat—the flint ax had been admirably well calculated to do all that the man of that age knew of as possible to be done with an ax.

We likewise admit that our neolithic extracts are useful, and that with them a good man may yet do good work. But there is scarcely more difference in the capabilities of the stone and steel axes than there is between these antique drug-remedies and the modern alkaloids.

You smile at this "wild exaggeration"—but that is because you are yet viewing the matter from the neolithic standpoint. When you have become as familiar with the uses of the alkaloids as you now are with the older drugs you will think differently.

Perhaps the first reason you will appreciate for preferring the alkaloids is that these agents have been studied and their properties determined with a precision impossible with the older drugs. This gives us one certainty with which to start—we know exactly what they will do. The physiologic experimentors were driven to the active principles because they could not make experiments that meant anything with the variable crude drugs. Curious, that after determining thus precisely the effects of atropine they should have attempted to deduce therefrom the clinical applications of belladonna.

Knowing exactly what our alkaloid will do, and just how much of it so much alkaloid will do, we have precision as to action and as to dose. The next step is, celerity in getting to work. The naked alkaloid is so quickly dissolved and absorbed that we get results very soon instead of having to wait till the active part has been dissolved out of the encumbering mass of tannic acid, gum, resin, pectin, cellulose, sugar, coloring matters, extractives, and the other useless matters that make up the bulk of the old doses.

Let's take account of stock: certainty of action, well known to us, certainty as to dose, quickness of effect, and to these add as no small advantages smallness of dose, absence of disagreeable taste and irritating qualities to the stomach, capability for hypodermic and intravenous administration—it may not sound like much, but in practice it is a stupendous advantage we secure.

Certainty and promptness of action enable us to intervene with corresponding

directness and vigor. Here is an emergency—we see exactly the difficulty, we have with us precisely the remedy that will quell the beginning trouble and restore normal conditions. In a few hours it will he too late, for material lesions will have occurred, and these require time for restoration. To dissipate the evil we must act at once and powerfully. How could we dare attempt this if we are not sure just what our drug will do, or how strongly it will act, or how long it will take to act? It is this uncertainty that paralyzed us in the old days, and forced us into an attitude of expectancy or nihilism—we dare not make a move when the effect of our intervention was so uncertain. Now, when with one swift stroke we can cut the knot and dissipate the gathering trouble, there commences to be a pleasure in the practice of medicine we never dreamed of before.

These things breed in the doctor promptness, decision, certainty of action; and these beget optimism; and these qualities beget appreciation and confidence on the part of the community. It is a constant wonder to us that all this goes on imperceptibly to the doctor himself. Everybody else recognizes the change in him before he does so himself.

Now my neolithic friend, we also would smile at this if we stood where you do, and saw things as you see them. But just try it for a year. Make yourself familiar with this active-principle business and put it to the clinical test. You do not have to unlearn much, nor to go back to school, nor to accept any vague and mystic theories. Everything is based on the plainest common sense, and hinges on to what you already know. Get a sample-case and a descriptive manual, and set the little giants to work. Study drug-action and dosage; don't try to get a full morphine action from gr. 1-67 every four hours—you know that's nonsense. But try the effect of calomel, gr. 1-6, every half hour for six doses, followed by a dose of an effervescent saline laxative that has possibly ten grains of magnesium sulphate in it—and see the result. Then instead of drugging an insomnic with a quarter grain of morphine give hyoscine hydrobromide, gr. 1-1000, every ten minutes till effect—or possibly a few granules of aconitine or digitalin will restore the cerebral circulation to normality and induce sleep better than any hypnotic.

But we must stop somewhere and it may as well be right here—if we got to telling all the neat therapy possible to the man who knows alkaloids we would never get through.

"Jock, when ye hae naething else to do, ye may be a sticking in a tree; it will be growing, Jock, when ye're sleeping." —Walter Scott.

DOES THIS UPLIFT THE DRUGGIST?

The July 4 number of *N. A. R. D. Notes*, official organ of the retail druggists, gives much prominence to an address delivered by T. C. Loehr, chairman of the Trade Interests Committee, at the last meeting of the Illinois Pharmaceutical Association. In this address Mr. Loehr urges the Illinois druggists to use every effort to induce physicians to replace the proprietary remedies with the U. S. P. and N. F. preparations. By so doing he says that pharmacists not only can improve their professional standing, but also "can materially increase their profits." At the same time Mr. Loehr scores the dispensing doctors. This kind of a doctor (as well as pretty much every other doctor), we gather from the address, is in his opinion sadly untrained in the art of writing prescriptions, gets his knowledge of medicine in much the same way that "the old ladies in the rural neighborhood imbibe theirs from the patent-medicine almanacs," and dispenses his own medicines "*for no other reason than that there is money in it for him.*" In the last analysis, therefore, it seems that the doctor dispenses for very much the same reason that the druggist is devoted to the promotion of the galenics, because (quoting Mr. Loehr again) "it pays." As to the validity of other reasons for physician's dispensing, Mr. Loehr is discreetly silent.

The purely disinterested (?) character of Mr. Loehr's remarks is further shown by his diatribe concerning the doctor's ignorance, so great that "many of them are incompetent to practise their own profession," their "mistakes," so many of which "are hidden by the sod," followed naturally by the statement that "the remedy . . . lies in educating the public to a realization of the danger to life and death through the indiscriminate dispensing by physicians." Of course the pharmacist is to step into the breach and through his *superior* knowledge save the public from the awful ignorance of the doctor—*dispensing meanwhile to be forbidden by law!*

Odds bodkins! How natural this sounds. How nicely it works out! The doctor compelled to go to the druggist for his remedial agents, and then compelled to take only the things which the druggist can prepare himself—at his own price!

In this same "uplift" number of *Notes* the first and apparently leading article is one of great rejoicing that the Dr. Miles Medicine Co. has adopted a new contract plan which will give the druggist a bigger profit on this line of "patents."

We haven't a word of comment! But what's the matter with giving the doctor just a little show and—well a sort of a smell at the credit bottle for things he himself has done. We are not quite all, neither are we all quite fools. Why not be fair all around? Why are you so anxious to curtail the liberties of the doctor while so willing to and so active in extending your own?

N. A. R. D. Notes is a bright little paper; but it would far better serve the profession of pharmacy by using its influence to raise the professional and ethical standard of the druggist than by using its pages, as it has in the last two or three numbers, to attack the members of the medical profession, with which it should be on the friendliest terms. The best way for the druggist to get the support of the doctor is to *deserve that support.* Legislative coercion is something to which the doctor will not willingly submit; and again we urge the necessity of being on guard against this movement. Every doctor in America should be alive to the danger implied in this threat.

The longer I live, the more I am satisfied of two things: first, that the truest lives are those that are cut rose-diamond-fashion, with many facets answering to the many-planed aspect of the world about them; secondly, that society is always trying in some way or other to grind us down to a single flat surface.

—Oliver Wendell Holmes.

THE CAUSE OF CANCER

In *The Chicago Clinic* for August is an important contribution from G. Cooke Adams, on the etiology of cancer. Dr. Adams three years ago, published in *The Lancet* his first paper on this topic. In this and subsequent articles he enunciated the following propositions:

Cancer is not bacterial or parasitic; it is a constitutional disease from a specific virus originating in the blood, showing after the thirty-fifth year and most virulent between fifty and seventy years; it may be congenital, certain forms acquired by infection or contagion; the principal factor is heredity; the principal excitant is prolonged local irritation in one inheriting the tendency or debilitated by—in order of frequency—syphilis, alcoholism, obesity rheumatism, gout, or tuberculosis; the principal dietetic factors are sugar, beer and alcohol; the principal hygienic factors are forests where the dropped foliage decomposes in stagnant water, also badly made and drained streets, overcrowding, bad housing and feeding; it is preventable, and only curable by acting against the exciting causes; the foliage of myrtaceæ, lauraceæ and coniferæ specifically render the natives of lands where these trees are indigenous immune to some extent; an oil from certain eucalypti seems to possess specific power of arresting the process; all treatment, local and internal, toxic or irritant, must be avoided, especially that by the x-ray and Finsen's light. Early and complete removal is better when the growth is accessible.

Since publishing the above Dr. Adams has made investigations in Europe and America

that corroborate these conclusions fully. The increase in mortality in cancer may be shown by statistics from Chicago, where one in 1000 deaths were from this malady in 1856, one in 21.8 in 1906. The mortality is greatest among the Germans, Irish, Scandinavians and Slavonians. Of Chicago Germans dying over the age of 40, one in four die of cancer; of the Irish, one in six.

This is not due to climatic conditions, since persons born in Chicago and Illinois have about the lowest death-rate from cancer of any people in the world, the average of native Chicagoans for many years being one death from cancer out of every 400 deaths, and one in 72 of those dying over 40. Meanwhile the Italians and Chinese maintain the very low cancer mortality of their native lands, the former subsisting mainly on macaroni and the latter on rice. The races showing the large cancer mortality consume much canned, preserved, dried and pickled meats, sausages, etc., often uncooked, far more than in their native homes, as more accessible here. When stock has been condemned for cancer, tuberculosis or actinomycosis, the diseased parts are removed and the balance of the animal goes into the forms of meats above described, which is mostly consumed by the classes among whom cancer most prevails.

Dr. Adams' investigations invariably show that:

The toxicity of secretions and tissues of stock fed on wet malt is much greater than with animals properly fed; the nutritive va ue of stock fed on wet malt is less; the toxicity of meat products from stock fed on wet malt is much more; the secretions and tissues of such stock more rapidly putrefies; the toxicity of the secretions of people who eat largely of such food products is greater at all ages than that of o hers properly fed; the secretion toxicity of Germans, Irish, Scandinavians and Slavonians increases at the cancer prevalence periods of life; the secretion toxicity of Italians, Chinese and native Chicagoans is relatively lower at similar ages.

From these data he draws the following conclusions:

The diet of those showing the highest cancer mortality ferments and putrefies more readily, with toxin formation and absorption, than the diet of those showing the lower cancer mortality. The habitual use of a diet composed largely of preserved meat products, particularly after 40, induces a rapid vulnerability of tissues in those predisposed to cancer. The diet of such predisposed persons should be assimilated to that of the more immune races, excluding purins and proteids.

One modifying item is added, that the diet to which an individual has been accustomed is less liable to occasion cancer than one that is quite new. This upsets the whole kettle. We had just concluded to quit our morning coffee as purin-bearing, and eschew meat to get even with the beef trust and save ourselves from carcinoma, when this last scrap of information paralyzes us. After all—kismet! Can man escape the fate to which the gods have destined him?

We would wish that Dr. Adams had explained to us how a disease can be infectious and yet neither bacterial nor parasitic.

We have come to the end of the long period of reconstructive prevalence inaugurated by Graves when he commenced to "feed fevers." From all sides, from Wiley, Chittenden, and all the scientific investigators who are molding public thought, comes the injunction to eat less, to use less meat, less nitrogen, and to closely scrutinize the quality and the antecedents of what we do eat.

Sugar, beer and alcohol—the three principal dietary causes of cancer. Beer and alcohol we can easily do without, as we do not use them now; but sugar! We have long nursed a pet hobby that men who do not care for alcohol always like candy, hence we have favored its use to supplant any possible want in the system that might otherwise lead to bibulous habits. But if we are to cut out the caramel, and eschew the caffeine-bearing beverages, and

the cool "stein" in summer and comforting punch in winter, what are we to substitute? For we must use something—is not a change perilous? And the more abrupt the change, we assume, the greater the danger.

The only thing showing above the horizon is the cereal imitation of coffee. Whatever ills its use entails they are not yet known, and they can scarcely be as terrifying as the thought of cancer.

Eat moderately, using foods that require plenty of chewing; stop eating as soon as appetite is relieved, not sated; and gradually draw down the daily allowance of proteids, choosing the less heavy varieties of these. Has anybody collected the statistics of the numerous persons who were subsisting on red meat and hot water some years ago? Are they all dead from cancer?

And since the whole argument points to autotoxemia as the main cause of this fearsome malady, keep the bowels clear and clean.

HOW ABOUT JALAPIN?

The routine initial cathartic of our fathers was calomel and jalap. In our practice we have replaced the Mexican drug with the native products of the May-apple and the blue flag, podophyllin and iridin, while resuming the mild chloride in minimal dosage. Was this a mistake?

Much has been added to the old knowledge of these remedies so far as their chemistry and their physiologic action is concerned, but as to their clinical applications we are not so sure. We know that all these vegetable cholagogs act more surely if a trace of bile is added, and at present a little bilein goes with every granule. But was there not good reason in the preference shown for jalap, a preference that had reason behind it, even though neither the elders nor we ourselves could explain it?

Then as to the dose of jalapin: we have followed the French dosimetrists in presenting the pure resin in granules containing a milligram each. The Pharmacopeia formula for compound cathartic pills allows two centigrams of jalap resin for each pill and suggests two pills as the dose—about gr. 2-3 (45 milligrams) at each dose. This would indicate about gr. 1-12 (5 milligrams) as the proper proportionate strength for each granule.

But we employ drugs with far more nicety than our fathers did, and we get better results with less doses because we direct them more accurately. Let us hear from those who have utilized jalapin, and we shall be better able to judge than we would by acting solely on our own necessarily limited experience.

This is the way that physicians mend or end us,
Secundum artem: but although we sneer
In health—when ill, we call them to attend us,
Without the least propensity to jeer.—Byron

INTESTINAL FLORA

Our preachment anent the necessity of keeping the stomach and bowels free and so far as possible disinfected is founded on clinical observations. That there is plenty of evidence of the correctness of our views from the standpoint of the bacteriologist may be indicated by the following extract from a paper by Kellogg in *Modern Medicine:*

Patient	Diagnosis	Number of Bacteria Per Gram of Dried Feces
M. T.	Chronic constipation, pernicious anemia	640,000,000
A. C. R.	Pernicious anemia	3,648,000,000
S. S.	Pernicious anemia	1,340,000,000
M. B.	Anemia	935,000,000
D. A. S.	Pernicious anemia	1,444,500,000
S. W.	Pernicious anemia—spinal sclerosis	6,250,000,000
C. B.	Pernicious anemia (after treatment	64,680,000
H. M. B.	Pernicious anemia	21,000,000,000
H. B.	Pernicious anemia	10,080,000,000
I. F.	Anemia (intestinal cancer)	3,200,000,000
F. W. P.	Gastric carcinoma, anemia	5,880,000,000
M. H.	Gastric ulcer, hyperhydrochloria	125,000,000
C. F.	Gastric ulcer	254,800,000
A. W.	Hyperhydrochloria (neurasthenia)	3,312,500,000
M. T.	Hyperhydrochloria (neurasthenia)	231,000,000
J. O. F.	Hyperhydrochloria (gastric ulcer)	1,170,000,000
M. McD.	Hyperhydrochloria with chronic constipation	2,083,000,000
H. M. D	Hyperhydrochloria (neurasthenia)	7,700,000,000
S. H.	Hyperhydrochloria	1,040,000,000
J. A.	Hyperhydrochloria	1,332,000,000
A. C.	Slight Hypohydrochloria, autointoxication	180,000,000
M. F.	Hypohydrochloria with diarrhea	250,000,000
J. R. S	Hypohydrochloria, migraine	1,500,000,000
A. F.	Hypohydrochloria autointoxication	3,350,000,000
R. A. R.	Hypohydrochloria, chronic constipation, and autointoxication	3,750,000,000
M. L.	Hypohydrochloria, gastroenteroptosis	2,850,000,000
E. D.	Neurasthenia, hypohydrochloria	1,200,000,000
V. H.	Hypohydrochloria, neurasthenia	6,625,000,000
H. S.	Neurathenia, internal hemorrhoids.	225,000,000

R. G. O.	Neurasthenia	160,000,000
M. W.	Neurasthenia, autointoxication	12,500,000,000
A. S.	Neurasthenia, chronic colitis	1,625,000,000
I. K.	Gastric neurasthenia	333,000,000
D. D.	Neurasthenia	2,250,000,000
L. McK.	Neurasthenia	300,000,000
A. C.	Neurasthenia, constipation	476,000,000
F. M.	Neurasthenia	356,000,000
E. L.	Neurasthenia	1,800,000,000
M. G.	Neurasthenia	8,000,000,000
A. P.	Neurasthenia, constipation, autointoxication	1,140,000,000
M. H.	Neurasthenia	1,750,000,000
L. D.	Neurasthenia	2,475,000,000
J. I. B.	Neurasthenia	240,000,000
M. A. V.	Neurasthenia, autointoxication	2,808,000,000
W. J. O.	Neurasthenia	1,650,000,000
S. F.	Chronic mucous colitis	425,000,000
K. P.	Mucous colitis	504,000,000
J. R. W.	Chronic colitis	4,598,000,000
W. J. L.	Colitis	2,450,000,000
M. W.	Chronic colitis	15,255,500,000
J. R.	Infant (6 months,) diarrhea	8,000,000,000
J. MacP.	Infant, diarrhea	7,000,000,000
H. R.	Acute indigestion, diarrhea (infant)	11,400,000,000
E. E. S.	Arterial sclerosis	1,800,000,000
C. P. F.	Arterial sclerosis	16,666,000,000
M. V.	Arterial sclerosis	883,000,000
M. L.	Mitral insufficiency, chronic enteritis	550,000,000
E. T.	Mitral insufficiency, gall-stones, malnutrition	1,083,000,000
L. F.	Chronic cholangitis	3,750,000,000
Mrs. K.	Gall-stones (before operation)	2,187,000,000
Mrs. K.	Gall-stones (three weeks after operation)	306,000,000
I. B.	Gallstones	5,720,000,000
L. W.	Chronic cholecystitis (after weeks of treatment)	53,400,000
L. B.	Appendicitis	882,700,000
L. L.	Appendicitis	4,620,000,000
M. C.	Chronic rheumatism	2,250,000,000
X. X.	Rheumatoid arthritis	8,720,000,000
A. C.	Chronic rheumatism	1,070,000,000
M. B.	Chronic nephritis	160,000,000
E. T.	Acute nephritis	8,333,000,000
A. McC.	Chronic nephritis	675,000,000
S. M. V.	Acute nephritis, complete pyloric obstruction	961,000,000
M.D.F.P.	Typhoid fever	9,000,000,000
A. L.	Chorea	987,000,000
A. J. W.	Locomotor ataxia	2,000,000,000
M. T.	Epilepsy	2,086,000,000
H. W.	Exophthalmic goiter	6,900,000,000
J. H.	MAN OF FIFTY IN HEALTH	33,000,000
A. B.	MAN OF TWENTY IN HEALTH	25,000,000

Whoever in the darkness lighteth another with a lamp, lighteth himself also. —Auerbach

THE MEDICINAL TREATMENT OF PHTHISIS

The Eclectic Medical Gleaner gives these suggestions on the drug treatment of phthisis:

Veratrum is of value when the pulse is rapid, full and bounding, with fever, and to control nervous irritability, in men. Minute doses.

Aconite to control fever, gastric or intestinal irritation and pulmonic inflammation—the small frequent pulse with fever being the specific indication. Keep for acute phases. Only minute doses.

Lycopus improves stomach digestion, soothes cough, controls small and passive hemorrhages, and maintains good circulation when heart-action is rapid and tumultuous. The best results in lingering cases with frequent small hemorrhages. In early stages. The best remedy to favorably influence the consumptive. Liberal doses.

Potassium arsenate for muddy, ill-hued, inactive skin, which does not readily resume place after being "pinched up." Minute doses.

Hyoscyamus to control cough and afford rest. Small doses.

Opium, as little as possible. Severe, watery, exhausting diarrheas, if other means fail.

Codeine, to control cough, gr. 1-8 to 1-4 as far apart as possible.

Prunus, heart and stomach tonic, soothes cough and mucosa; restrains diarrhea and quiets nervous unrest. Cold infusion, not the syrup.

Morphine and atropine for active hemorrhages, check bleeding, quiet apprehension and fear, relieve cough, give rest and sleep.

Atropine alone for colliquative sweats. Full doses for hemorrhages. Follow with aconite or veratrum for fever, then echinacea for sepsis; lycopin for a long period, later.

Lobelia for precordial oppression, with slow laboring pulse. Small doses, then stimulate circulation and restrain cough, quiet nerves.

Bryonia for sharp cutting pains, hacking cough; small doses early and persistent; for quick, weak pulse give with aconite; full bounding pulse with veratrum; full labored doughy pulse with lobelia; sharp vibratile pulse and irritable tongue, with prominent papillæ, with rhus; for great excitement and throbbing carotids, with gelsemium; if drowsy and inclined to be cold, with belladonna.

Hydrochloric acid for red, irritable tongue, and where forced feeding is required, or excessive egg diet.

Nux vomica for weak digestion with flabby, pale tongue; with hydrochloric acid or ipecac.

Iron, small doses of acid forms, sharpens appetite and improves nutrition; large, strong doses do harm.

Codliver oil benefits a few, but not if it nauseates. Well-cooked fats are better. At all hazards the digestion must be kept as perfect as possible.

"There is no bank account that can balance a sweet, gracious personality; no material wealth can match a sunny heart, an ability to radiate helpfulness and sweetness."

CONTENTMENT VS. DISCONTENT

Sitting in the observation car of a limited express train crossing the continent, surrounded by all the luxuries that man can devise, we realize the amazing advances that have been made in the last century.

Nestled among the hills, by the border of a little stream, we notice the tepee of an Indian family. The man hunts when necessary, fishes, eats, smokes, propagates his race and sleeps. All his wants are fulfilled and he is contented. As his ancestors have been for thousands of years, so is he. The flint arrowheads that represent his highest achievement are no better than those dug up from the earliest deposits of the Nile, estimated to be one hundred and twenty-five thousand years old.

Is contentment always a virtue? Is discontent always a vice? Which is productive, progressive, uplifting?

Contentment means rest, peace, comfort, and time for enjoyment and the cultivation of the refined pursuits of the dilettante—but to he really enjoyed these must first be earned. Physical rest is pleasant when every muscle aches with the fatigue of effort, persistent until the limit of its endurance has been reached. Rest without fatigue is unendurable. Mental rest follows the exercise of all the powers of the mind, continued until success has crowned them to the full limit of the worker's capacity, and he looks over his winnings and realizes that he has done all his most critical estimate of himself demands.

Men reach their level, every time. Circumstances really influence us little. If we have it in us to make more of a success we shall have the energy to work for it. If capacity is overpowered by inertness it is not capacity. If worth is kept back by obstacles it is not worth but weakness. Faculties may lie dormant, but they are only proved by their exercise, and their assumed existence, when not manifested by action and achievement, is only conjectural.

The refuge of weakness and mediocrity is authority. Whenever we find a man sheltering himself behind another man we pity the self-confessed weakling. Can we truthfully call any human being a man who submits to any other the privilege of regulating his conscience and his action? Indeed, such self-abnegation is a confession of inferiority so degrading that we can with difficulty realize that any man can admit it, much less glorify his subservience and count it a virtue. What are we to say when he elevates it into a law by which to judge his fellow-men, and denounces all who may be unwilling to grovel at the feet of his idol?

Contentment is stagnation; it is decay, for there is no such thing as absolute repose, and we must perforce go forward or back. It is age and that devolution that approaches the second childhood.

We represent a younger, more aggressive form of humanity. We are not a bit satisfied with ourselves or with you. We see in and about ourselves plenty of room for improvement and progress, and we are insistently demanding it of you. We tell you that you are not nearly as good doctors as you are capable of being, that your knowledge of pathology, physiology and therapeutics is woefully defective, and that there are oceans of unknown facts in this line all around you, so thick that you can't move in any direction without dipping into some of them. We see opportunities for work and achievement that nobody but you can embrace, and we want you to realize this, and to arouse in you every last drop of your fighting-blood.

The work we have done has been in large measure preparatory, and its further

development is in the hands of the clinical physician, the family doctor. Experiments on animals are well enough but they are not final—if they were, we should pronounce arsenic an excellent and safe cathartic. The application of our deductions to actual practice remains as the great final test, the capstone to the arch. It is not the laboratory but the clinician—it is *you*—that must take up the work; you that must stand shoulder to shoulder with us if the best that can come is to come from this great movement. Forward!

GELSEMININE: A NEGLECTED ALKALOID

This powerful alkaloid is beginning to attract attention, and inquiries are being made as to its clinical application. Its effects are those for which gelsemium is employed, but the galenic preparations are uncertain, not only as to strength but as to action. The latter is due to the presence in varying proportions of a second alkaloid, whose effects, while not definitely studied, are known to resemble those of strychnine. Gelsemium and gelseminine are employed strictly for their sedative effect.

In *Ellingwood's Therapeutist* for July the editor contributes a paper on gelsemium from which the following data are taken:

This agent is a depressant, paralyzing the spinal inhibitory ganglial cells and the spinal motor-nerve cells. Small doses, by sedating inhibition, may cause a primary increase of motor activity, but after toxic doses the muscular paralysis is extreme. Even with complete muscular relaxation the mind is tranquil and respiration unimpaired. In fatal doses, however, death results from paralysis of the respiratory centers. The pupil is dilated and accommodation paralyzed, causing amblyopia, diplopia, dizziness, exophthalmos and drooping of the eyelids; the latter being an early symptom of the paralysis should be taken as an indication for stopping the further administration of this remedy. If continued these symptoms are followed by a sense of constriction of the chest and by general muscular paralysis.

The principal indication for this remedy is acute cerebral hyperemia, as manifested by a bright flush on the face, bright eyes, with contracted pupils, hot skin, busy restlessness and excitability. Nervous tension and irritability are high, the head and face are hot, fever rises, the pulse is short and quick but not always hard.

The indications for gelseminine are often presented in the acute febrile maladies of childhood, either specific or local. The doses should be pushed until relief or until the eyelids droop. It is also of especial value in treating acute colds, small doses being given every half hour. In influenza it is very useful; also in acute nephritis following exposure to cold or wet. For spasmodic pains in the urinary organs and for acute cystitis it is an excellent remedy. Vesical tenesmus and chordee are fully controlled by gelseminine. Bloyer employs it also for severe pains in the liver, kidneys, ureter, bladder, uterus or ovaries. It is very effective in dysmenorrhea of the spasmodic or congested type, also for congestive amenorrhea. Ovarian neuralgia is controlled by it if spasmodic. Few if any remedies control uterine colic so certainly. It has been given with benefit to induce dilation of the rigid os, when the parts are dry and hot, the edges hard, thin and unyielding, nerves excitable.

Gelseminine has a marked influence over neuralgias of the fifth nerve; also over headaches from cerebral hyperemia. Its influence over sciatica is uncertain, but Ellingwood speaks of its value for persistent darting pains in the muscles.

Gelseminine is of value for rapid pulse due to irritability and general nervous excitement in patients of normal strength. Any heart symptoms in such cases are relieved by it.

Gelseminine, in effective doses, is less depressant than aconitine or veratrine. The writer has employed it in many cases where the above indications were presented and has found it uniformly effective. Some day we will learn perhaps that all medication does not consist in stimulating and toning, but that the sedatives, properly applied to suitable cases, are quite as conducive to health, comfort and the prolongation of life.

GASTRIC DISTURBANCES IN NEURASTHENIA

Some hints on the diagnosis and therapeutic management of the common gastric disturbances so frequently seen in cases of neurasthenia—the socalled "gastric neuroses"

By GEORGE S. BROWNING, M. D., Sioux City, Iowa

WHILE it is undoubtedly true that there may exist purely local disturbances of the nerve-supply of the stomach alone, with practically no departure from the normal in other parts of the nervous system, by far the great majority of socalled gastric neuroses are but a localized manifestation of a pathologic state of the whole neuronic tissue.

Gastric Disturbances in Neurasthenia

The most familiar and frequently observed of these general nervous affections is neurasthenia, which, in a large percentage of cases, presents some of the features of gastrointestinal disorders. The predominant symptoms may be referred to either the stomach or to the intestines. In the former case the gastric symptoms are of the most varied and multiform character. As regards subjective symptoms, they may be capricious appetite, eructations, heart-burn, epigastric distress and fulness, together with cardialgia or cardiac palpitation. Chemical analysis of the chyme shows marked variations in the gastric secretions, ranging from complete absence of the digestive juices to intense degrees of hyperchlorhydria or even gastrosuccorrhea.

In aggravated cases actual dilation of the stomach occurs, usually due to a myasthenia, which in turn is dependent upon a weakened functionation of the trophic nerve-supply, in common with the general nerve weakness. On the other hand, a severe and long-continued gastritis, with its attendent disordered states, may be the etiologic factor determining a subsequent neurasthenia.

The Diagnosis of Stomach Disturbances

The diagnosis of the various stomach disturbances demands a careful and thorough examination by all the means at our command, of the entire organism as well as of the stomach itself. Confining attention to this organ, its examination should include the ordinary inspection, palpation, percussion, succusion, etc., in order to locate the position and determine the outline of the viscus as near as may be. In regard to percussion, I would emphasize the value of auscultatory percussion, using the phonendoscope or a stethoscope of the Bowles' type, when the stomach is in its natural condition or is filled with fluid, but when it is artificially dilated by air or gas the exaggeration of the sounds by the phonendoscope may cause more difficulty in determining the exact boundaries of the viscus than is the case with ordinary percussion.

Distension with air forced through the stomach tube, or with gas produced by effervescence within the stomach after ingesting the two powders of a seidlitz powder separately, for instance, will often cause sufficient bulging of the viscus to render its outline fairly distinct to inspection. A possible confusion may be caused by elevation of the transerve colon above the anterior wall of the stomach, by which there appears a protrusion lower than the actual position of the greater curvature. But this test must be accompanied by careful percussion and the limits of each organ differentiated by the varying tympanitic tones, and the results verified by distension with fluid and subsequent percussion. The capacity of the viscus may be determined by measuring the amount of air or water required to fill it, as the one or the other is introduced.

The Use of the Gastrodiaphane

While filled with water the gastrodiaphane may be inserted and its showings be observed. It may be of possibly additional advantage to fill the stomach with a weak solution of quinine when using the diaphane, as this may be rendered slightly more luminous than plain water.

The value of the diaphanoscope may be called somewhat in question, as in my experience the area or luminosity varies decidedly with the position of the lamp; and not only is the stomach transillumined, but also various other abdominal organs are, to a certain extent. Thus, if a certain amount of pressure is applied to the lower part of the abdominal wall and the view directed from below upward, the intestines transmit the light to a certain degree, and the transillumination seems to extend down nearly to the pubis.

Fluoroscopy, or Skiagraphy

A recent extremely valuable method of examination has been utilized and is being perfected, namely, fluoroscopy or skiagraphy. By this means valuable information in regard to the functionation of the stomach and its topography has recently been obtained. The gastric peristalsis and consequent movements of the ingesta have been quite satisfactorily studied after the introduction of foods mixed with bismuth subnitrate, which chemical throws a sufficient shadow on the fluoroscopic screen, or x-ray plate, to fairly outline the organs containing it in suspension. From this method a good general idea of the location and size of the stomach may be derived, while the boundary of the greater curvature may be perhaps quite accurately observed by introducing a flexible instrument sufficiently dense to produce a shadow, assuming that it will pass along the lower border of the stomach. For this purpose may be employed an ordinary stomach tube filled with bismuth, or, what I have found to be seemingly more discernible with the fluoroscope, the ordinary Einhorn's gastric electrode, which consists of an insulated flexible metal spiral.

All the foregoing methods of examination should be utilized, where possible, in conjunction with each other, and with an exact chemical analysis of the chyme, and possibly other chemical tests of the gastric absorption, motility, etc. The findings of all these tests should then be considered individually and collectively, and as nearly exact judgement as possible formed as to the condition of the stomach itself and its relative influence upon the state of the whole organism.

The Therapeutic Management

The diagnosis having thus been accurately deduced, the real issue then presents itself: what shall be our treatment —the therapeutic management of the case, which is, after all, the ultimate end and aim of all our study and refined systems of diagnosis?

Primarily, and of most vital importance, we must treat the ailing individual, especially in neurasthenia, and not the disordered digestion alone. It may be alleged that if we cure the neurasthenia and ignore the stomach, that organ will take care of itself and recover in due time without especial attention. This is in a sense true,

but these neurotics who have their "stomachs on their brains" demand some special treatment of their digestive organs, and justly so, even though it be only "symptomatic." In fact, how little of our therapy is even yet other than "symptomatic!"

Space will allow consideration of but few conditions and few points in the therapeutic management of them. Omitting all discussion of the great question of diet, I will direct attention first to medicinal agents.

Treatment of Hyperchlorhydria

One of the most frequent disturbances met with is hyperchlorhydria with or without hypersecretion. Here the prime indication is, of course, to diminish the activity of the acid-glands in the pylorus (if, indeed, the pylorus is the site of these glands) and to relieve the symptoms produced by the excess of acid. Sedation of the secretory apparatus may be brought about by atropine in small doses, gradually increased to the physiologic or the desired effects. From gr. 1-250 to gr. 1-100 may be given one-half to one and one-half hours after meals. Bromides, preferably of sodium, ammonium or strontium, in dosage of 10 to 20 grains, also have a sedative action on terminal nerve-endings, and in some cases are given the preference over atropine.

Codeine phosphate or sulphate, gr. 1-12 to gr. 1-4, may prove to be especially valuable in these conditions, having not alone its sedative influence locally on the stomach but also exerting its quieting action on the general nervous system, tending to counteract the hyperexcitability of the asthenic nerves. Personal experience has shown resorcin to be one of the most valuable remedies in cases of hyperacidity. It has some of the analgesic properties of the phenol compounds, and a more decided antifermentative, with possibly some sedative action on the secretion. It is best administered in fairly large doses, 3 to 6 grains, from one to two hours after eating; it can be advantageously combined with some form of a papaw derivative, such as papayotin, which, by digesting some of the carbohydrates in the stomach, prevents to a certain degree their fermentation there.

The Use of Alkalis

Administration of alkalis, although "symptomatic treatment," is at the same time decidedly "rational." Not only do they neutralize the excessive acids present, thereby relieving the discomfort of the patient, but recent studies have revealed the possibility that the alkalis do not cause an increased secretion from acid-glands, but may even act as depressants to their function.

In general, these remedies should be administered about one hour after meals, when the acidity is at its highest stage. The preparations of choice are magnesia usta, sodium carbonate or bicarbonate, the latter being the least desirable on account of the formation of carbon dioxide, causing distension of an already myasthenic stomach. Repeated personal observation has demonstrated that alkalis so administered for a considerable time will produce a permanent decrease in hydrochloric acid secretion to normal or even below. Alkaline mineral waters may be utilized at times, especially for the psychic effect on those who have the sanitarium or the "springs" habit.

Hyperchlorhydria is at times accompanied by attacks of pylorospasm, which can be most promptly and satisfactorily relieved by a hypodermic of hyoscine-morphine-cactin compound, as was recently demonstrated in a patient in whom a dose of one-half the ordinary tablet of this combination sufficed to relieve in a few minutes, since when there has been no recurrence of the spasm.

Physical Methods of Treatment

Of physical methods of treatment the most useful is intragastric galvanization, the anode within the stomach, to be followed by a few minutes' faradization with the rapidly interrupted secondary current.

The opposite condition, hypochlorhydria or achylia, is also frequently observed in

neurasthenia, and it likewise demands a certain amount of local treatment, the dominant note of which is stimulation. Symptomatically, dilute HCl is indicated in quantities sufficient to make up the deficit in the gastric secretion, but further than this, it has been found that this acid is the most efficient stimulant to the acid glands in the stomach, hence its continued administration is called for until a normal gastric acidity has obtained. It should be given in fairly large doses, 10 to 20 minims, fifteen to twenty minutes before and also after meals.

Should this dosage not be tolerated by the mucous membrane, we may have recourse to its administration by the stomach tube once or twice a day, introducing a few ounces and then withdrawing it after having been in contact with the gastric mucosa five to ten minutes. It may be advisable to use a six-percent solution for this purpose instead of the ordinary HCl. Beyond its simple stomachic and stimulant power HCl has also a degree of antiseptic efficiency, since observations have shown that hypochlorhydria is always accompanied by an increase of putrefaction in the intestines, as evidenced by an excess of ethereal sulphates in the urine.

Indication for Intestinal Antiseptics

Here, then, is a direct indication for maintenance of intestinal antisepsis by other means, of which none are more efficient than the sulphocarbolates of calcium, sodium and zinc, either combined or singly, and in conjunction with laxatives as required by the condition of the bowels. These should be administered continually or at frequent intervals, to be determined by repeated examination of the urine and the indican present in it. As a local and general tonic strychnine is indicated, the most desirable form being strychnine arsenate, since with this we can obtain the bitter stomachic effect and also the general tonic effect of the arsenic upon the whole nervous system.

The dosage may be from gr. 1-60 to gr. 1-30, or more, as seems requisite to the case in hand.

Since most of the subjects have a deficiency of digestive ferments it is well to combine the strychnine with an artificial digestant, such as papain or pepsin. The former is preferable, and if an additional bitter tonic is desired, quassin may be introduced into the combination. The depressed local states of the stomach structures in this condition can likewise be improved by the use of electricity. Here the negative pole of the galvanic current should be used as the active electrode to stimulate the gastric glands and musculature. This application may be followed by a few minutes of stimulating faradism.

Secretory Disturbances

These secretory disturbances of neurasthenia are often accompanied by dilation of the stomach of greater or less degree, with consequent impaired motility. The treatment already outlined does much to correct this dilated condition when combined with lavage and other requisite measures. Especially useful is the proper application of intragastric electricity, by which many stomachs with the lower curvature from one to five inches below the umbilicus have in my experience been brought back to normal position, or nearly so.

I wish to protest, therefore, against the indiscriminate resort to gastroenterostomy in these cases of gastrectasia, without previous trial of ordinary remedial measures. Surgical intervention in such cases in disregard of the general nerve- and muscle-asthenia at the foundation of the condition is in the highest degree irrational, illogical, and not conducive to the best welfare of the patient.

THE STORY OF THE AESCULAPIAN CLUB

A unique organization, consisting of five Massachusetts and Rhode Island doctors and their wives, which cultivates the social as well as the professional side and contributes to the pleasure of life—as well as to its profit

By J. M. FRENCH, M. D., Milford, Massachusetts

THREE years ago I called upon the editor of CLINICAL MEDICINE while on my way home from the "Lou-Pur-Ex," and in the course of our conversation he invited me very cordially to write out the history of the Aesculapian Club for the columns of his journal. It has been a long while in coming, but this paper is the result.

A Social Medical Club

It is the story of "The Aesculapian Club of Worcester, Middlesex and Norfolk Counties in Massachusetts, and Providence County in Rhode Island"—a society with a long name but a short roll, unique in its scope and methods, and occupying a place of the first importance in the lives of its members. It is a social medical club—if such a combination is admissible—and consists of a membership which is limited to five country doctors and their wives, living in five different towns, four counties, and two states. The towns are not all of them adjoining, and the two most remote from each other are separated by more than twenty miles, but all are united by trolley cars and telephones, so that a short trip on the electrics will bring them all together; and each doctor can sit in his office and talk with every one of his brother members.

Methinks the readers of CLINICAL MEDICINE are aware that it is not the easiest thing in the world to find in one vicinity five doctors who can work together without jealousies—and how passing rare it is to find five doctors' wives who can associate intimately without heartaches! Yet this is just what the Aesculapians have found, brought together, and united in one harmonious CLUB. In this club are to be found five doctors and their wives, all of whom are so thoroughly congenial as to heartily enjoy each other's society, so like-minded as to find satisfaction in the same kind of pleasures, so well agreed that no formal agreement has ever been necessary, and so well suited to each other that they came together spontaneously at the outset, and have continued to associate intimately for more than six years without the development of a single misfit.

How the Club Came to Be

It must be admitted that the fates were propitious for the formation of the Club. The five doctors were all active members of the Thurber Medical Association, a local society which has met without interruption for more than fifty years, being, it is believed, the oldest strictly independent local medical society in New England, if not in the United States. In this society it has long been the custom for the ladies to attend the annual meetings, and at times this practice extended to the monthly meetings as well, so that the wives as well as the doctors themselves had become well acquainted and on friendly terms with each other. As it happens in all societies, so it happened here, that certain of these members and their wives were drawn more closely to each other by a process of natural selection. Being all socially inclined, "clubable" people, and having to a certain extent similar tastes and habits, they soon became warm personal friends. As no two of the doctors live in the same town, there was no chance for professional jealousies—and when you think of it, it really is a great deal easier to see the good points of your brother physician who lives in the next town, and who sometimes calls you in consultation, than it is of your next-

door neighbor, who is at the same time your sharp competitor in business.

The Club first came together in June, 1901. There was no formal organization, nor has there even been any written constitution. One rule only is held to be fundamental: Unanimous agreement in everything. Whatever all agree to do, can be done; whatever any one objects to, is not done.

Some of the Club Meetings

In order to preserve a record whereby the barbarians of the outer world may gain some knowledge of the pleasures enjoyed by the Aesculapians, a few of the meetings will be briefly characterized. Our first formal meeting was in the form of an outing, and consisted in a trolley ride and visit to the Medfield Insane Asylum at Harding, Mass., with its more than 1200 patients under the care of Dr. Edward French, who was our host and with his estimable wife showed us over the institution. Another trip, ever to be remembered with pleasure, was a visit to old Concord, home of Hawthorne, Emerson, Thoreau, Bronson Alcott, and the other transcendentalists, and scene of the "Concord fight." It is there, by the old bridge,

> "Where once the embattled farmers stood,
> And fired the shot heard round the world,"

that we went through the form, not to say the farce, of electing our first officers. As we had five towns and five families represented, so we chose five officers: a president, vice president, secretary, treasurer, and librarian. To be sure, as the president is always on hand, there is never any need of a vice; as there are no funds outside the members' pockets, the treasurer is not overburdened with duties; and as there are no books, papers or other documents outside the record book of the secretary, the office of librarian is a strictly honorary one. But then, for that matter, so are all the others. Once each year—provided we happen so to feel inclined—we hold an annual session, with a dinner, an address by the retiring president, election of officers, toasts and responses.

At other times we visited Lexington, twin sister of Concord in historic memories; "Oldtown," or Natick, where we luxuriated in the famous "Hunnewell's Gardens" by the lakeside; old Marblehead, a quaint old town, where we were entertained intellectually by the president of the Historical Society; and "Down Providence River," where we enjoyed a "shore dinner" so well that we are planning to repeat it in a few weeks. Once or twice we have formed a party and attended a Boston theater. Often the Club is entertained at the home of some of its members, and sometimes at the various hotels in our jurisdiction.

When the Ladies Entertained

At one of our meetings we were regaled with papers from each of the lady members rehearsing some of her "experiences as a doctor's wife." To say that these papers were rich, rare, and racy, is not telling half the truth. If we should some day be able to induce our ladies to allow us to publish those papers, there will surely be a treat in store for our readers.

Occasionally we have branched out into a genuine "scientific session," more to prove that we were to some extent a medical society than for any other reason. At the first of these, we considered the comparative treatment of pneumonia, from the standpoint of the different methods of practice. Our president spoke for the "regulars;" from Boston we imported a well-known eclectic—now the editor of *The Journal of Therapeutics and Dietetics*—to enlighten us as to the methods of his school; from Worcester a prominent homeopath came down and told us the methods of the followers of Hahnemann; and our own Johnson closed and capped the climax by his pithy story of the alkaloidal treatment of pneumonia. Then we called on our audience for remarks. And I may say right here that our guests came from far and near, strictly on invitation. The result was a great success, and those papers have been published in I do not know how many medical journals. As to the meeting as a whole, one of our guests remarked, that

"for a variety show it distanced anything he ever saw."

The Alkaloidal Session of the Club

The next socalled "scientific session" was known as the "Alkaloidal Session." It was attended by the New York representative of THE ALKALOIDAL CLINIC, and its proceedings were reported at length in THE CLINIC, so they need not be repeated here.

THE MEMBERS OF THE AESCULAPIAN CLUB

Do the members turn out? Well, yes, I should say they do. This is a test which few medical societies can endure. But with the Aesculapian Club, coming from five towns covering a territory of twenty miles or more in extent, it is the usual thing for every member, male and female, to be present. One winter day, for example, when the ground was covered with a sloshy snow and the rain was pouring down, making the traveling of the worst, we had a meeting at the home of Dr. Sanborn. Every member was present. One doctor started out with his wife for the nearby electrics, and before reaching the cars was met by a call to attend a case of confinement—for the Aesculapians are all general practitioners, the real thing—and to this he responded without hesitation, put the case through with a rush, took the next available car, and got to the scene of the conflict just in time for a belated supper.

Most of our meetings are so arranged as to allow the doctors the bulk of the forenoon at home, in order that they may attend to all urgent calls; and then we return at night in season to look after belated callers before the hour of ten.

When a Member was Sick

One of our members was seriously ill a year ago and compelled to give up his business, though not confined to his bed. Few Sundays were there all the summer long when he was not visited by some one or more of his fellow "clubbers," sometimes

half professionally, always socially. When the cooler weather came he went south for his health, and during his absence the Aesculapian Club truly languished. But with the return of summer he also returned, much improved in health, and established his office in Woonsocket. But a few weeks passed before we met again, as usual every member being on hand. This time our chief aim was to secure a group picture of the Club, something we had long wanted. The result was a success, and it is presented to the readers of CLINICAL MEDICINE herewith.

Much pleasure is added to the life of the members by the Club. Its meetings are events to be looked forward to, and their enjoyment is doubled by the fact that they are enjoyed by the wives as much as by the husbands. They furnish the recreation and social enjoyment which are so much needed by the country doctor, and they help wonderfully to break up the everlasting monotony in the life of the doctor's wife. We mix just enough of the professional element with the social to prevent our forgetting that we are doctors, and that is all. Most of us are members of a number of medical societies, but the universal verdict is, that not one of them has done so much to add zest and pleasure to life as has the Aesculapian Club.

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What a splendid thing an organization like this is! What possibilities it has of adding sweetness and strength into our professional relations, by bringing a few congenial men and women into such close social contact that they really may learn to know one another. There ought to be more of these clubs—organizations free entirely from medical politics and personal self-seeking, with the single aim of contributing to the worthwhileness of life. Doctors, perhaps more than any other class, live too hard—take life too seriously. Here is the antidote! We hope that many of the readers of CLINICAL MEDICINE may be so stimulated by the reading of this article that they will get together a few congenial spirits—and "go and do likewise." Do so, and tell us the story of your success through these columns. There is no better time to commence then during our beautiful autumn months.—ED.

THE SYNERGISM OF DRUGS

While the bulk of our work should be done with single remedies, there are conditions where their combination is advisable. Where and why drugs act synergistically, with illustrations

By WILLIAM F. WAUGH, M. D., Chicago, Illinois

WE who especially study the action of definite active principles believe that the bulk of our clinical work should be done with single remedies, each administered with a distinct object. The action of a single remedy may be watched and estimated more readily, and we learn better how much it requires to produce a desired effect, how long it takes and when to stop it. Disease, as clinically presented, may be rarely so simple as to present but a solitary indication, and several drugs may require attention at the same time; but it is certain that with each addition the task of watching the effects is increased—and how any man can carry on a dozen different remedial operations at the same time, we leave to the phenomenon who plays at many games of chess at one and the same time.

When Remedies should be Combined

Only after one has had long experience in the administration of single remedies should he commence to combine them. But he then may be qualified to do this and with results never dreamed of under the old system of prescription building. Under the latter we combine several remedies, each of which may suit the case, in the hope that some one of them shall do so; or we give the indicated

remedy and throw in one or more adjuvants to get more effect The very pertinent question of why not give a larger dose of the principal ingredient is unanswerable.

In several instances it has been noted that the union of a number of agents acting on the same general system seems to exert a greater power than any one of the ingredients in a dose equivalent to the combination. For instance, if we combine three cathartics, each of which exerts alone an action that may be designated schematically as one, the combined effect, instead of being three, may equal six or more. How can we explain this singular observation?

Suppose we desire to increase the elimination through the skin—we may do this by stimulating the activity of the sudoriparous glands or by relaxing the tension of the cutaneous vessels. If we administer a secretion stimulant and at the same time remove an obstacle to its action by relaxing the vasomotors, we get from the secretion stimulant a decided effect, whereas we may have had little if any effect from either of the remedies if administered alone.

Combinations in the Case of Purgatives

Years ago Brunton called attention to the fact that if we add a very minute dose of atropine, or of morphine, to our purgatives, we increase their purgative effect, by paralyzing the inhibitory nerves that constitute an obstacle to the purgative action. If the dose of atropine is increased we get a sedative action on the intestinal musculature, which interferes with the purgative action instead. Given alone, the minute dose of atropine would not purge at all. Given with true purgatives the latter act in smaller doses than if the atropine were omitted.

Arbutin is an ideal remedy for irritations of the bladder. Such irritations may be increased or even aroused by the presence of oxalates in the urine. We know that such catarrhal affections once set in operation do not necessarily stop when the original excitant is removed, any more than does an epilepsy. But if the oxaluria is stopped by a little nitric acid before meals, or by treatment of duodenal fermentation, the urinary irritation will subside under smaller doses of arbutin and more speedily than it will if the oxaluria is neglected.

Discrimination in Selecting Heart Tonics

Heart weakness is an exceedingly complex matter, taking in as it does the condition of the muscular and nervous elements of the heart and the blood-vessels, the central nervous system, and the quality of the blood itself, etc., and possibly on the therapeutic studies of the next generation we may base a discriminating choice among the heart tonics. But many prescribers have affirmed that they get a better effect from a combination of several heart tonics in minute doses than from a comparatively equivalent dose of any one of them. It may be, as is assumed, that each of these tonics acting on a different mechanism or function, we have a general, uniform increase of tone of the entire apparatus, better than an inordinate and unsustained toning of a single part or function, the others not being coordinately strengthened. This at least expresses the clinical observations made—whether it be literally true remains to be demonstrated. Meanwhile it is simply an excuse for the old empiric style of prescribing, but points to a desirable path for investigation.

An Interesting Phenomenon

A similar hypothesis may be formulated to account for a phenomenon recognized in studying the effects of the hyoscine-morphine-cactin compound anesthetic. Much of the anesthetic effect is due to the depression of cutaneous sensibility both by hyoscine and morphine; but it seems that the effect of the combination notably exceeds that of either ingredient when administered alone. Assume that the cutaneous anesthesia due to morphine, gr. 1-4, equals schematically ten, and that of hyoscine hydrobromide, gr. 1-100, equals twenty, the effect of the combination seems to be nearer sixty than thirty. These figures are of course simply assumed, as an effort to explain hypothetically a phenomenon witnessed in the clinical field; and they should be tested by experiment before acceptation.

But it is not difficult to explain such an observation. The cutaneous sensibility may be directly reduced by one agent and the conductivity of the nerve-trunks by the other; so that no sensation at all is transmitted, whereas even with a much larger dose of the one agent or the other some sensation would pass to the brain. That is, we assume that we may by the one reduce the cutaneous sensibility to one-half the normal; double the dose will not entirely abolish the remainder. By the other we may similarly reduce the transmitting power of the nerve-trunks, and double the dose will not entirely abolish this function. But if we at the same time reduce to one-half the nerve-sensibility of the skin, and the transmitting power of the cords, the latter will not be able to transmit any of the enfeebled impression on the cutaneous nerve endings.

I am quite conscious that this explanation is not satisfactory and am ready to hear it questioned; also to listen to any better explanation of the phenomenon that may be offered.

This brings up another, though a tangential, observation as to the action of this hyoscine, morphine and cactin combination: the anesthetic action seems to be directed in large part against the cutaneous sensibility rather than against the cerebral centers. A physician recently took one of the tablets in our office and one hour later entered the office of a down-town dentist, where he had a sensitive nerve-pulp removed from a tooth, without pain. During, as before and after, his visit with the dentist, he transacted his business without impediment, the effect on the consciousness being trifling. If we can develop an anesthestic that acts as such solely or largely on the peripheral tissues involved in operations and least on the cerebrum, it is surely an advantage and a development in precise application of remedies. Many observations have been made that harmonize with this one, and the matter seems worthy of study and development.

DIPHTHERIA: ITS SYMPTOMS AND DIAGNOSIS

This paper was read before the first meeting of the Third Councilor District Society of Utah, at Richfield, August 13-14, 1907. It is the report of an experience with one hundred cases

By J. E. MORTON, M. D., Heber City, Utah

DIPHTHERIA is an acute, infectious and contagious disease, characterized by the appearance of pseudo-membranous deposits upon the mucosa or denuded skin. The exudate contains the Klebs-Loeffler bacillus. The disease is accompanied by constitutional symptoms of varying severity, and in my experience has always shown marked symptoms of specific systemic infection; indeed I had rather take the systemic signs as my criterion than the local signs as often the location of the characteristic membrane is beyond our field of vision.

The disease is both endemic and epidemic. I have in one day been called to three cases separated by eight or ten miles of country with no exposure that we could trace. However, the great majority of cases can be accounted for by an exposure, all the more readily in country practice than in the city.

The discharges, whether blown out of the mouth or nostrils in the act of coughing or otherwise, are sufficient to transmit the infection to another, especially if there be in the second party a predisposition to affections of the throat. I have, though rarely, noted the disease where no abnormal conditions of the nasal or pharyngeal cavities could be dectected.

Clothing will hold the deadly germs for an indefinite time. In one case a sack of

carpet-rags was responsible for a severe attack of laryngeal diphtheria, after the rags had been kept for many months, there being no other possible exposure. Records prove conclusively that the specific bacillus has a life within the soil of many years—twenty-three years having been proven in one place where the graves of those dead of the disease were responsible for those taking the disease who opened the graves: one of the many good arguments in favor of cremation, especially in such diseases.

Unsanitary surroundings predispose. Dry, dusty weather, with wind, aid in the spread of the bacilli, and favor the production of an epidemic. But it is noted that all rules are violated and the disease is found to exist in all kinds of weather and conditions. I believe there is no disease having a wider variance in times of appearance, localities and conditions.

Children from three to five years of age are said to be more likely to become victims, but this rule is often violated, it occurring in babes of a few weeks old up to late adult life. In some families there is an undoubted predisposition to the disease, they becoming victims to an attack at the least exposure, and having repeated attacks. There are those who may be exposed thousands of times and yet never develop the disease, their natural resisting power preventing its contraction.

No one now questions the causative relation of the Klebs-Loeffler bacillus to the diease. Frequently, however, a mixture with streptococci or staphylococci complicates the infection, producing their characteristic systemic symptoms to further embarass the unfortunate patient.

The bacillus is described as "about as long as the bacillus tuberculosis, but twice as thick, always rounded at both ends, frequently knobbed, to present the appearance of dumb-bells. It is mobile, shows no spores, has its most healthful temperature at 98.6° F., and stains perfectly with alkaline methylene-blue. It thrives best on a blood-serum culture, and lives desiccated over one hundred days."

The local action is practically the effect of the bacillus. By contact the superficial layers of the mucosa are destroyed, the cells of which, mixed with leucocytes and bacilli, pus, fibrin, and at times red blood-cells, produce a coagulation necrosis. More or less necrosis of the submucous tissues may exist, with hyperemia and tumefaction of adjacent mucous and glandular tissues. Eventually the fibrinous exudate sloughs off, leaving a clean, smooth mucous surface. If the process is severe, extensive necrosis of the deep layers occurs with formation of cicatrical tissue.

The membrane itself at first appears as a thin, vaguely defined film, the mucosa having an appearance of being painted over with mucilage. It increases in density as it develops, and when fully formed is of a grayish-white color if pure cultures of the specific bacillus are demonstrated. The color varies, however, with the admixture of other germs from yellow to a yellowish-brown, or if red cells be present to a reddish brown or black. It is elastic, firm, and when peeled off smoothly is not unlike a whitened piece of pork rind or a piece of buckskin, the pin-point depressions in it resembling the pores we find in the animal tissue mentioned.

If one attempts to remove by chemical or mechanical means this membrane, it will bleed at the site and quickly there is a re-formation. But when resolution normally takes place the effusion of serum, leucocytes, etc., underneath loosens the membrane, the edges first curling up, and the false membrane is discharged either whole or piecemeal. I have recovered complete casts of a nasal cavity, presenting the characteristics spoken of. Some cases present very rapid degeneration—a very unsightly spectacle—the odors of which are very foul.

The Symptoms of Diphtheria

The constitutional symptoms are the result of the absorption into the circulation of the toxins of the specific germs found at the local lesion. Though the period of incubation is said to be seven to fourteen

days, I have seen fully developed cases appear in two days, and to the other extreme at least in two cases it seemed to be at least thirty-one days.

The usual picture presented may be summarized as follows: The attack is ushered in with slight chilliness, moderate fever, malaise, aching in back and limbs, with sometimes a dull headache. The temperature seldom rises above 102.5° F. In not more than two percent of my cases have I observed it higher. Oftener have I found it nearer 100°F., in older children and adults, and even in the younger after the first day's onset.

The pulse is a better sign for me. Like colors or tones it can hardly be described.

It is usually more rapid than the temperature would cause you to anticipate; at times irregular, feeble, and arhythmic, compressible and much like the pulse of septic infection, but having less force; and if the patient exerts himself the characteristics mentioned are the more prominent. Convulsions often usher in the attack in the neurotic, while in those of the opposite habit we may observe but one marked objective symptom—extreme drowsiness.

Soon, perhaps the first or second day, the throat becomes dry, with a "sticking," burning, constricted feeling, with some (though moderate) tenderness. The tenderness is not nearly so pronounced as in tonsillitis, nor is there the difficult deglutition of the latter.

The Appearance of the False Membrane

Examination of the pharynx reveals hyperemia, with later the pseudomembrane, usually first appearing on the tonsils, especially their inner and upper borders, from whence it soon migrates with new colonies to the soft palate, and in severe cases may continue until the nasopharynx above and the larynx and trachea below are covered. I have one case on record in which the site of entrance was a cut on the toe, and another similar wound on the hand, the membrane appearing here several days before it did in the pharynx.

The membrane at first appears as a film of mucilage, then gradually thickens and spreads until treatment or resolution puts a stop to it. There is more or less swelling of the adjacent parts, especially the glands in the immediate vicinity of the angle of the jaw. Seldom is there great tumefaction of the internal structures. The external swelling has in a few cases been extreme, the neck measuring three or four times its usual size.

By the third day the exudate covers most of the tonsils, soft palate and pharynx, or may present nothing whatever here but instead will be found to have taken its abode in the nasal or nasopharyngeal cavities, or below in the larynx, in the former location producing an excoriating nasal discharge with mouth breathing, while in the latter we note a hoarse, rasping, metallic cough.

Once hear this characteristic cough and you will never forget it or confound it with any other condition. If the visible membrane be removed a bleeding surface presents in all cases. The tongue may be coated a yellowish white, with fetor of breath. This being the third day we find the pulse more rapid and light, with temperature between 102° and 103°F. Liquids which usually burn or irritate the throat may now be swallowed without complaint. The urine usually presents albumin.

The Progress and Prognosis

In the average light case, without extensive deposits, improvement begins at the end of a week, glandular tenderness and enlargement disappear, the pseudomembrane is cast off by the eighth or tenth day, and convalescence established. Dangerous symptoms are now more likely to appear, especially heart failure from the effect of the toxemia, paralysis of the muscles of deglutition (food swallowed returning by way of the nose), and later on paralysis of the muscles of the limbs and mayhap of other parts of the body.

The greater the surface occupied by the exudate, other things being equal, the more grave the prognosis. Yet it may be the

reverse, as often the systemic infection is in opposite proportion to the membrane in reach of our detection. In the extension of the membrane to the nares we may have an otitis media result, with abscess and perforation of the tympanum.

In the laryngeal form, with its rasping cough, croupy, metallic with huskiness or even absence of voice, we have the socalled membranous croup. Stridulous breathing with a steady increase of dyspnea, every muscle being brought into play to assist in forcing air through the narrowing lumen of the larynx or trachea, is accompanied with a progressive cyanosis, death resulting from asphyxia. There is nothing more distressing to behold than such a case.

When the systemic infection is pronounced all symptoms are increased. The temperature, at first elevated, may fall to subnormal and remain so until treatment brings about resolution or death supervenes.

In about 20 percent of my cases an eruption similar to a marked case of hives has appeared, varying from the third day to two weeks after treatment was begun. In several cases where no antidiphtheritic serum was administered the eruption was as marked and severe. There is a raised eruption with swelling of the subdermal tissues of the face and perhaps the whole body, intense itching accompanying it. The rash in a small number resembles that of scarlet-fever, lasting from a day to a week, desquamation occurring rarely.

In upward of one hundred cases I have treated there were no two exactly alike, and one must allow for a wide variation of the cardinal symptoms, or he may pass by a severe case because it apparently presents mild symptoms.

Complications and Sequels of Diphtheria

Hemorrhage from nose or throat, depending upon nose or throat ulceration, is a prominent symptom. Erythema, urticaria, or purpura, parenchymatous changes in the heart, liver, kidneys, and spleen—the heart lesion being more dangerous during early convalesence. Gangrene is sometimes observed. Renal complications usually are not severe, but may remain as a chronic nephritis. Anasarca at times appears.

Of the sequellae, paralysis is the most important and common. It is rare in very young children, it increases in frequency with the years. It usually appears in the second week of convalescence, but may be postponed, and is undoubtedly due to the action of the toxins on the peripheral nerves, the severity of which seems to bear little relation to the severity of the attack. The pharynx is often affected, producing difficult deglutition. An unsteady gait results from the limb muscles suffering paralysis, also a loss of the patellar reflex in a small number of cases. Strabismus and difficult accommodation result when the eye suffers with the rest. The heart-beat may become abnormally fast, or slow or weak, each alternating rapidly. Complete failure at the height of the disease, or from sudden exertion during convalesence is most to be dreaded.

Differential Diagnosis of Diphtheria

Diphtheria is differentiated from follicular tonsillitis by the more definite character of the exudation, more clearly defined area of mucous membrane involved, being confined to the tonsillar region in the latter, with lymphadenitis, tumefaction of the parts, albuminous urine, greater prostration, and sometimes the epidemic character of the former. Quinsy at times resembles diphtheria, but a clear-cut differentiation by the symptoms may be easily made out.

In quinsy the throat symptoms are more acute, there is more pain and distress, greater swelling of the internal parts, with more tenderness both internally and externally and far greater dysphagia. There is absence of the pseudomembrane, despite the fact that there is a coating resembling it in appearance, but differing from it in the cardinal points; the ease with which it may be removed, leaving no bleeding surface beneath and not reforming readily. The course of quinsy is more rapid, the actual suffering greater, no loss of the patellar reflex, temperature usually higher, pulse fuller and stronger but not so rapid, and the mouth is with more difficulty opened wide enough for inspection

of the parts—quite the contrary of diphtheria.

There are those who yet declare there is a difference between membranous croup and laryngeal diphtheria, but so far as my experience goes I am unable to see the difference. It is well to have in mind the symptoms of true croup, which differs from the malignant variety by the absence of the specific bacillus, the sudden onset with perhaps several periods of relief occurring at intervals, exposure to damp or cold precipitating the attack, which usually culminates at midnight and is repeated for the two succeeding nights in a series of similar attacks. Laryngeal diphtheria never produces alarming symptoms early in the attack, nor are there likely to be periods of relief as in true croup. Pulse and temperature either are not distinctive or the reverse of diphtheria.

In scarlet-fever and measles the patient has a sore throat often resembling the diphtheritic one, but in these the rash precedes the angina, not following it as in the latter. The membrane of scarlet-fever is not so firm and leathery, and the Klebs-Loeffler bacillus is absent, unless we have a mixed infection, when we have a puzzling case to deal with, presenting a combination of the symptoms of these two common maladies. But in scarlet-fever and measles the entire upper respiratory tract is at once involved; in diphtheria the uppermost parts with a gradual migration downward. In scarlet-fever suppurative otitis and induration of the glandular connective tissues are frequent; in diphtheria suppuration is rare and the glandular structures are simply edematous. In the former paralysis is absent, but severe nephritis is more likely to present in the latter. The knee-jerk of the former and the "strawberry-tongue" of the latter need not confound us.

Summary

A summation of the distinctive symptoms of diphtheria should probably include the following: A moderate temperature, never higher than 103°F.; pulse rapid, weak, compressible, and if you will excuse the term, imparting the sensation to the examining finger of a "wobbling" of the heart in its efforts at propulsion; the character of the exudate, the definite membrane; the malaise, stupor, absence of pain or distress; aching of back and limbs in the early stages, or in adults, tendency to sleep more than is usual; and last but not least, the demonstration of the Klebs-Loeffler bacillus in the exudate or in cultures therefrom.

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In a succeeding number Dr. Morton will discuss the treatment of diphtheria, to which the foregoing article serves as an excellent introduction.—Ed.

REFLECTIONS FROM ALASKA

The advantages and disadvantages of medical practice in Alaska, with some interesting remarks upon the prevailing diseases and the methods of treatment found most successful

By HARRY C. DeVIGHNE, M. D., Wrangell, Alaska

THE practice of medicine in cities or even in territory adjacent to large centers of population where one is within reach of able consultation, well-stocked pharmacies, hospitals, laboratories, and the various diagnostic and sanitary equipage, is a slightly different, though perhaps not less difficult, proposition than practising medicine one hundred and fifty miles from a hospital and consultation, with no railroad within four hundred miles, and where every doctor must be his own pharmacist, dentist, surgeon and pathologist.

Many may wonder why one should select such surroundings as a "field," but the answer is as easy and as old as the surrounding

mountains; a lively income covers a multitude of inconveniences, and Alaska is a good place in which to make and save, or to make and lose money, according to one's proclivities. And after all, when one has no consultants, one neither has envious, bickering rivals nor patronizing old confrères admitting grudgingly that "he is all right for a young man." A well-thumbed library, a dozen of the best independent journals, probably a hundred reliable and well-studied drugs, and all the surgical appliances I really need, constitute my visible stock in trade, with which I have successfully and unsuccessfully treated almost everything going.

The Prevailing Ailments

Conditions here are, I imagine, similar to those in other remote regions. Probably there are more gunshot wounds than one would see in "the States," and the usual crushed and lacerated injuries associated with buzzsaws and lumbering in any place. Then the extensive fishing industries are responsible for a peculiar and virulent form of sepsis called locally "fish poisoning." This occurs on the hands and face, the slightest abrasion when infected often resulting in alarming symptoms. Of course, we have accidents in the mines. A well-directed but misplaced pick is usually sufficient cause for a series of dressings. Unfortunately a premature explosion seldom leaves anything for the doctor but to offer condolence.

Among the Indians, of which there are perhaps a thousand in this vicinity, tuberculosis and scrofula have played sad havoc. Swollen glands or their resultant scars are the rule, while the exceptions frequently exhibit the "Hudson Bay brand," i. e., advanced syphilis. Many of them however have a fine physique and are not ill-favored. They are of average honesty, though of easy virtue, appreciative of kindness and quite sensitive to drug-actions. They have a fondness for anything in the way of medicine and prefer it in large bottles. To be particularly satisfying it should also be black, and the more unpalatable the better. Their vocabulary is limited and shows great poverty of synonyms. For this reason their frankness in detailing symptoms is often startling; a spade is usually called a spade. Until recently the Indians seldom considered the services of a physician necessary during labor, but since the H-M-C tablets came to town I have been frequently called to "make um baby come easy." This form of anesthesia is surely ideal for the country practician. I can add nothing of value to what has already been written regarding it, but will say that its repeated use has proven highly satisfactory.

The Drugs I Use

Coming down to drugs, I use a great many of the granules, made, needless to say, at the home of CLINICAL MEDICINE. These, with Lloyd's tinctures, Boericke & Tafel's tablet triturates and attenuations, a few miscellaneous salts and fluid extracts and a very few proprietaries comprise my "arms of precision." I never dispense in original packages, never give a proprietary until I have studied up its composition, and always add a pinch of mystery and a full measure of suggestion to the prescription. At the same time a discreet insistence, if necessary, that this is not entirely gratuitous serves to stimulate the action of the remedy and promotes an attitude of complacency in the physician.

The active principles that I have found most useful are: aconitine, aloin, atropine, acetanilid and codeine compound, bryonin, calcium sulphide, calcidin, calcalith, colocynthin, caffeine, colchicine, digitalin, ergotin, emetine, hyoscine, hyoscyamine, hydrastine, podophyllin, pilocarpine, quinine valerianate, strychnine arsenate, triple arsenates, three iodides, veratrine: and of course I use the intestinal antiseptics and saline laxative.

In beginning their use I often failed to get results because of inability to properly gauge the dose and my imperfect knowledge of just what I wanted them to do. This was remedied by beginning at the beginning, taking a drug, say aconitine, and studying it, not in one book, but in a dozen —homeopathic, eclectic, alkaloidal and allopathic—comparing what each writer had to say and netting the consensus of opinion regarding its known physiologic and

subphysiologic action. It was also found necessary to scrutinize more closely the patient, to find and recognize a definite condition, to locate a symptom or group of symptoms, that tell something and then select and apply the remedy according to whichever "law" or symptom promises the best results, and until something happens. Thus a case that had "gone the rounds" wherein the only symptom was frequent and severe itching and stinging of the skin, only yielded after four infinitesmial doses of apis mel, and I have given two granules of aconitine every fifteen minutes for five hours, to obtain a certain result.

Now a Final Word about Alaska

This is probably the most misunderstood and neglected appendage attached to any civilized country. Being in latitude approximately the same as the Scandinavian peninsula, having a coast line of over 8000 miles, warmed by the Japan current, and an area one-fifth that of the United States, Alaska offers a greater range of climate than that found from Florida to Maine. It should also be remembered that Canada and Mexico are no farther apart than are the most northern and southern extremeties of Alaska, and that from east to west the distance is the same as from Charleston, S. C., to Los Angeles, Cal. The fact that this immense territory is still governed by antiquated statutes framed when Alaska was thought fit for cold-storage purposes only, and the law administered by political hacks more acquisitive than efficient, and that residents are disfranchised in so far as selecting their judiciary is concerned or modifying their code, presents a situation with possibilities that are seldom overlooked.

As an instance of official thrift. A Swede, having finished a prosperous fishing season, and having saved something over $300.00, came to a neighboring town to catch a boat bound for Seattle. Like all good fishermen, his thirst increased in ratio to his proximity to a saloon, and while paying for a drink he incautiously exposed his "roll." About half an hour later he was arrested, charged with drunkenness and fined the limit, $100.00, which he paid. Less than half an hour later he was again before the court, charged with drunkenness. Again he got the limit and paid. Since he had about $70.00 left and since the "clean-up and clean-out" policy is firmly established in this court, the fisherman was again within the toils before night, charged with drunkenness. This time, however, a luminosity appeared on the hazy horizon, in the form of a "lawyer" who annexed the $70 and got the man off with ten days in the bastile. Many similar incidents would indicate that Justice in Alaska is surely afflicted with exaggerated emmetropia.

Notwithstanding present conditions Alaska is destined to a splendid future. Publicity will correct many present evils and it is fervently hoped that the supply of impoverished office-seekers will eventually play out. When attention is directed to the immense wealth in mines and fisheries, the agricultural possibilities, magnificent scenery, climate and missionaries, Alaska's future will take care of itself. These latter will some day receive their deserts in a more highly acidulated style than I command.

OCULAR CONDITIONS IN VILLAGE CHILDREN

A record of the examination of the eyes of 1,600 children, with some interesting observations concerning the character of the conditions found, and some deductions as to the methods of prevention

By LEIGH K. BAKER, M. D., Cleveland, Ohio

THE following notes refer to the children of East Cleveland and Lakewood, Ohio. While these are suburbs of Cleveland each has its own school and municipal government. For the most part the villagers are in comfortable circumstances.

The eyes of the elementary school children were examined quite thoroughly. First the test for vision was taken in the well-lighted halls of the school buildings. Afterward the eyes were inspected—externally—and the fundi were examined in the dark room with the ophthalmoscope.

A similar examination of over 7000 city school children had given the writer the impression that he must expect to find a larger percentage of children with marked ocular defects than is actually exhibited in the case of these villagers. This fact furnishes an excuse, perhaps, for publishing the general findings. Following the table are a few notes referring to items therein.

	No.	Per-cent.
Elementary pupils examined	1629	
Elementary pupils whose vision for distance is abnormal	220	13.5
Elementary pupils with excessive farsight (usually with astigmatism also)	118	7.2
Elementary pupils with nearsight (usually with astigmatism also)	87	5.3
Elementary pupils with glasses at the time of examination	81	4.9
Elementary pupils advised, specifically, to get glasses at once	47	2.9
Elementary pupils advised, specifically, treatment and refraction with reference to glasses (practically all of these cases need them)	65	4
Lowest estimate of those who need glasses, who do not have them	112	6.9
Percent estimated who need glasses		12
Personal letters written to parents of pupils	263	16.1
Pupils advised personally regarding hygiene of the eyes		19.4
With inflammation of lids of one or both eyes	478	29.3

Comparison with City Schools

After several years' experience in testing vision the reports of our Cleveland elementary teachers were reviewed by the writer. He found about three thousand cases in the six upper elementary grades in which the teachers had evidently followed the instructions in making the tests. Of these cases 18.6 percent were reported as having defective vision—over 5 percent more than in the case of the village schools. In examining in the city schools the writer usually examined only such cases as were reported defective by teachers. But so many of these showed marked errors of refraction that he came to expect to find one child in five with sufficient eye trouble to demand the use of some remedy. Now in the case of the villagers scarcely more than 12 percent need "glazing." To be sure there are others with less than one diopter of hyperopia who could wear weak lenses. But would it not be only such persons as are intent upon selling glasses, for the profit therein, as would want to provide them with lenses? Of the 7.2 percent all have one or more diopters of farsight.

Scarcely 5 percent of the children were wearing glasses prior to the examinations—not half as many as evidently should do so under our present school methods of eye work. It is too early to report results for the Lakewood schools, but in East Cleveland, during the eight months succeeding the examinations, the percentage of spectacle users increased from 3.9 percent to 8.5 percent for all elementary pupils.

Children Wearing Glasses Unnecessarily

In this connection it is interesting to observe that more than 16 percent of 300 village high-school pupils examined are wearing glasses. Here is a startling case of over-glazing. Probably 5 percent of these pupils do not need glasses. On

the other hand a small percentage, who do not have them, really need them.

In the case of 4 percent of the pupils there was so much haziness of the eye-ground that it was rather difficult to estimate the amount of error of refraction. In any event these cases called for treatment and refraction under a mydriatic and this was recommended, taking it for granted that the attending oculists would provide glasses wherever needed. As a matter of fact nearly all of these cases have sufficient hyperopia and astigmatism to render the use of lenses, at least for desk work, advisable.

As usual, some were found who were wearing misfitting lenses. Others had been given glasses on account of symptoms of eyestrain, following some fever, who did not need them. In spite of them the eyes recovered in time, in most of these cases, and the glasses, though discarded, got the credit of effecting a cure. Still the aggregate of such cases is not large. Thus it is a curious fact that people, otherwise very intelligent, will allow themselves to be bitten by the optical bug.

Advice Given Children and Parents

Quite a large percentage of the letters addressed to parents advised hygiene rather than glasses and personal advice—often emphatic—was given to some 20 percent of the pupils. Of course the sin most often committed is work at close range. This accounted for much mild inflammatory trouble.

We recommended treatment for styes, inflamed and granulated lids, imbalance of the external muscles, crossed eyes, etc. For example, we noted 29 cases of crossed eyes (1.8 percent of the children) in which the eyes were not and had not been under treatment or under the supervision of an oculist. Perhaps this will illustrate better than any other item the fact that parents neglect the eyes of their children. Too many young adults wear glasses, it may be, but the popular cry that "too many children wear glasses now days" is humbug. It is one of those things about which people talk and then fail to act. Is it not the common experience of oculists that their refraction cases are adults, not children? People hate to spend the necessary amount of time and money to have their children properly protected in such matters, failing to realize the importance of it, and that is all there is to it. It is up to the medical profession, and, so it seems to many of us, to the teaching profession as well, to instruct parents.

Oculists for Public-School Work

For twenty years the writer has been giving attention to the preservation of the special senses—especially vision—in connection with education, and during the past eight years this has claimed most of his time. As a result of his observations he is satisfied that legally qualified eye doctors, and their trained assistants, are the proper people to supervise the subject in all schools.

Boards of education in small cities, towns and villages can very well afford to pay for the services of a competent eye doctor, as examiner, during a week or two of each year at the rate of from thirty to fifty dollars per hundred pupils. During certain months, when office work is unusually light, the oculists can afford to put in a few weeks, each year, in this way. With a trained assistant to test vision and record clinical notes, and write letters to parents, as dictated, such work can be rapidly accomplished. One should soon acquire the necessary dexterity to examine over a hundred cases during the hours of the school day with sufficient thoroughness for diagnostic purposes. After a few days one gets used to the rapid work and does not notice the fatigue.

In large cities the problem is not the same. Here police power must sustain the examiners and compel action. Therefore state, municipal or national health authority must provide for each city an oculist in chief and secure for him the necessary means to enable him to call to his assistance the local oculists, organizing them and supervising their work in such manner as will secure the examination and treatment

of the eyes of all minors whom the state compels to jeapordize the health of their eyes in the training for citizenship. While some oculists would not care to give time to this sort of work many of the younger men undoubtedly would be willing, if properly organized and remunerated, to give it a part of their time. After the first year it would only be necessary to examine the children of one grade each year—preferably the second grade.

In time this work would logically pass under the general supervision of the national department of health, the creation of which by the federal government we confidently look forward to within the not too distant future.

These notes would not be complete did I not acknowledge the hearty interest and support, in this work, of Superintendent of Schools, W. H. Kirk and Mr. F. G. Smith, President of the Board of Education, of East Cleveland. Also Superintendent J. M. Frederick and Dr. John F. Hobson, President of the Board of Education, of the Lakewood schools.

PHYSICIANS WORKING TOGETHER

The rise of the spirit of fraternity in the world and its expression in practical cooperation. The relation of the medical profession to this movement and how it should benefit by it

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THE good that men can do to teach each other in the spirit of fraternity is practically unlimited. The spirit of the hour finds its best expression in fraternal cooperation. A wave of warm humanity is sweeping over the land which brings with it a loftier purpose and desire to enter into right relations with our fellow man, and a realization that reckless, cut-throat competition, with its waste and extravagance and *laissez-faire* policy, can never be reformed to give peace and equity. Competition is commercial warfare, and is wasteful and destructive because it is war. It is the antithesis of the right brotherly relation in which man should stand to the members of his own family. Underneath all efforts at working together, all attempts at fraternal cooperation, lies the old truth expressed in the old adage, "In union there is strength."

A Man's Interests Not His Own Merely

If a man once realizes that his own interests are identical with those of his neighbors, he will soon begin to feel that instead of being a segregated atom he is really a member of the greater family of the world.

Man is a social being; he finds his best interests are served not by antagonizing but by cooperating with his fellows—getting into right relations with them. This is the dominant note in the effort of the present time, and it underlies all reforms—social, ecclesiastical and governmental—the effort to get into right relations. We meet with it everywhere, it permeates everything, and it is bringing in a new era, the era of fraternal cooperation.

Cooperation holds wonderful possibilities; it means the betterment of all economic and social conditions. Just now we are in the transition period during which the new order is growing out of the old disorder. Already it has made great progress, though few realize it, for the growth of the new is hidden within the shell of the old.

Never before in the history of the world has there been such a revolution in the minds of men as at the present time. It is a peaceful revolution, potential for good. "Peace hath her victories no less renowned than war," and a revolution of mind is greater than a revolution of the physical, inasmuch as the mind transcends matter and the arbi-

trament of the pen is greater than the arbitrament of the sword.

Selfish and Unselfish Cooperation

We have had sufficient experience of late with what selfish cooperation can accomplish through the trusts and great combines. Selfish cooperation represents organized greed. True cooperation represents organized justice and is the "Golden Rule applied to business." It seeks to promote the welfare of all, and the immense expense, waste and wrongs of competition are eliminated. If you have any doubt of what monopolistic methods can do you have not read the indictment of Standard Oil by Miss Tarbell, and the "Frenzied Finance" articles by Thomas W. Lawson of Boston, in last year's *Everybody's Magazine*. If there is any doubt as to what cooperation can bring about read Chas. E. Russell's significant story in the same magazine, entitled "Soldiers of the Common Good". There he tells of the few beaten but brave English weavers who, working for the common good, saved two pence a day and founded a business now rated at a hundred and forty million dollars. From a small and unfavorable beginning in 1843, the cooperative movement has increased in England and Scotland until one-fifth of all the inhabitants are now concerned in its enterprises, and the present capital invested is $140,642,130 (excluding agriculture) with a reserve fund of $12,000,000. Cooperation is destined to a far greater development, inheriting, as she does, the splendid riches of a new continent.

The rich men have learned the power of combining, and it is for the men of moderate means and the poor men to learn that their best interests lie in the direction of cooperation also.

John Bright declares that the man who makes two blades of grass grow where only one grew before is a benefactor of the race. The farmer produces today a bushel of wheat in three minutes, which it required three hours and three minutes to produce seventy years ago. And yet the farmer who grows wheat now works as many hours as did the farmer of seventy years ago. Who gets the benefit of the increase, the farmer? No. The people? No, the combines. Why? The people have not yet learned cooperation.

The Physician and Cooperation

The physician today is better equipped to save life, combat disease and relieve suffering; his field of knowledge is broader and his usefulness greater than his predecessor's of seventy years ago; and yet he is obliged to work as hard with no greater returns, and as one of the people, has to pay tribute to Caesar, the trusts, who get between him and the necessities of life and limit the purchasing power of his income, until he learns cooperation. When the doctor and the farmer have learned it, the profits that now go into the hands of the great combines will flow into their own bank accounts.

The principles that underlie all cooperative effort do not commend themselves to those who fatten on the misfortunes of others; but to every man who loves "a square deal" and believes in working with and not against his neighbor, they approve themselves, unqualifiedly.

These principles of cooperation appeal in the strongest way to the physician who devotes his time and his talents and his energies to the service of his fellow men, and it is but a natural sequence in the line of his present endeavor and in professional cooperation with his brother physicians in his county, state or national societies that he should seek to extend this cooperation to a wider field embracing his own and the public good.

The Physician's Influence

The influence of the medical man in the community is potent for good; his noble calling permits the exercise of this influence, and in all that pertains to the public and private welfare he should be a leader.

The whole country is awakening to the necessity of working together. Brother physicians, let us throw the weight of our influence into the movement for the upward lift and the betterment of things.

It is a cause that we, of all men, should be identified with. As with individuals, so

with nations—to those who believe in the forces that shape the destiny of nations by the adoption of a principle of rightousness, it is easy to foresee that if America is to maintain her lead in the procession of nations she must and will adopt nationally the principles that alone can exalt her in moral greatness.

Cooperation does not mean organized antagonism to existing enterprise and institutions but the choosing a better way to attain the same end and with far better results—the throwing of our influence to the strengthening of those enterprises which are disposed to deal fairly with us—to give us "the square deal," and aid us practically instead of theoretically. It is fraternal organization to develop the helpful existing industries, and the natural resources of this great and resourceful country, and to save and create profit to those actually helping. It is the same active principle employed in the trust, only in this instance the profits accrue to the people.

You share the profits, but in deriving a pecuniary benefit from the results of cooperation it is not the only one; you share the greater benefits of a square deal all around and the advantages of the combined effort, energy and brains of all other cooperators who lend their influence to its success.

Cooperation is the *way out when all else fails*. It is the keystone that holds together the arch of the great social structure, created by capital and labor, uniting the interests of both in the welfare of all.

We believe, in theory, in professional helpfulness: let us practise it, let us get together and work together in all ways. Fraternal cooperation warms the heart and aids the realization of how sweet it is to live.

—:o:—

We should like to quote from the letters of our friend Dr. Webley more of his warmhearted indorsement of the great principle of cooperation, which looks beyond the interest of the few to the benefit of the many. It is a principle which is receiving practical indorsement by the most hard-headed of business men, who have found that it *pays* to divide profits with employes and customers—pays not merely in dollars and cents, but in the cementing of friendship and the accomplishment of better, more lasting, more loyal work through the tie of common purposes. No cooperation can succeed that is not based *both* upon sentiment and upon practical common sense—and that is why communistic societies have come into existence only to wither away when the sun of adversity beat down upon them. The sound basis is the "square deal"—and in our profession "the square deal for every doctor." Stand by that friend who shows himself disposed to stand by you and to place *your* best interests above those of the almighty dollar.—Ed.

CHEMICAL CORRELATIONS IN THE ORGANISM

The significance of some of the disturbances which take place within the body. A lecture delivered before the convention of Naturalists at Stuttgart

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II

THESE phenomena by no means are the same in different individuals and under different circumstances; and this fact cannot be too much emphasized for medical and theoretic pathological consideration, for instance, as to the skin there attaches a special interest to the relation existing between myxedema and adiposis dolorosa. And yet, here, too, there must be certain intervening links, for this remarkable disease, myxedema, is unaffected by the administration of thyroid substance. (Compare Struebing, *Archiv fuer Dermatologie*, 59, p. 2).

But all the symptoms which depend directly on athyroidism have in common the fact that they are curable with thyroid substance, or also by the transplantation of this tissure. There is perhaps one exception to this, the cretins. Cretinism certainly does appear largely in connection with anomalies of the thyroid gland, especially goiter, and since the phenomena of cretinism in many respects correspond with those of myxedema and of cachexia strumipriva, this condition frequently is identified with athyroidism developed in youth. Evidently there is here a close relationship, but presumably there are intervening links, for Scholz showed in his extensive and most careful observations which he made at Krause's clinic that especially in the metabolism and in the therapeutic effect of thyroid substance there must be assumed to be a difference between those two states of cretinism and athyroidism.

When a thyroid gland exhibits the appearance of goiter from the medical or anatomical standpoint, that does not indicate anything about its functioning. There may be in this condition of struma a normal, a reduced or an augmented glandular secretion. Histologically, also, one would have to be very reserved in giving an opinion concerning the state of its function.

Effect of Thyroid Substance in the Circulation

When thyroid substances enter into the circulation in increased quantities, either by administration or through pathologically excessive activity of the gland, then the first effect is noticed upon the heart and upon the chemical changes which are effected in the cells of the organism. The contractions of the heart become more frequent and stronger, in the beginning at least (i. e. more rapid). From this results, then, that which is characteristic of cardiac phenomena in goiter-heart and in Basedow's disease. In the cells of the organism—the particular locality cannot be named—there is an increased decomposition of the living substance of the albumin and of the nitrogen-free substances. This becomes manifest in the total metabolism by an increased consumption of oxygen as well as by an increased excretion of carbon-dioxide, water, and nitrogen.

Here, again, we see how hyperthyroidism stands, to a certain extent, in strict contrast to those above-mentioned phenomena where there is a deficiency of action of thyroid substances on the cells of the body and in consequence there is decrease in the total decomposition of tissues of the body.

In what closer and more exclusive relationship the phenomena of a pure hyperthyroidism stand to those of goiter-heart and of Basedow's disease, and how far these two belong together, will not be discussed here. But hyperthyroidism certainly constitutes that which is essential in these states. In addition to these comes a long series of other phenomena in connection with the skin, the nervous system, the eyes, and above all, of the psyche—intellect and affections—all in exactly the same motley changes as were mentioned before when speaking of thyroid absence.

The Parathyroid Glands and their Secretion

The parathyroid glands, the epithelial bodies, must be considered apart in their chemical function from that of the thyroid. When these are extirpated, then we get the phenomena of tetany. Formerly these phenomena were also referred to the removal of the thyroid because then both thyroid and epithelial bodies were in most operations removed together.

It is very interesting that in clinics where the method of operation allowed the parathyroid glandules to remain while the thyroid was entirely removed, the after-effects were essentially those only of cachexia; when, however, the operation was very extensive, tetany was the result. Animals from whom the epithelial bodies were removed along with the thyroid, as a matter of course, became tetanic, while those from whom the thyroid alone could be and was removed, became cachectic. Before the real relation of the epithelial bodies and the thyroid to these conditions (tetany and cachexia) was known, the food of the animal (either meat or vegetable) was considered the determining factor. (Compare

Stoltzner, *Jahrbuch fuer Kinderheilkunde*, 6a, p. 482.) In accordance with the above is the fact that the administration of thyroid juice does not benefit a case of tetany, but neither is the administration of epithelial bodies of any value. This could be used as a general argument against the assumption of any chemical relations existing and in favor of a nervous relationship. Yet there evidently does exist a close kinship between the thyroid and parathyroid, and this alone would make a chemical action of the epithelial bodies at least probable, inasmuch as the chemical action of the thyroid is certain. How and by the changes of which parts of the nervous system tetany does originate is totally unknown.

The Coccygeal, Thymus and Other Glands

More obscure yet is our knowledge of another series of so-called blood-glands, namely, the coccygeal gland, the carotic plexus, the thymus, of all of which we know nothing whatever. The special experiments and observations which were made on animals with the object of discovering the function of the thymus gland thus far have been absolutely unsuccessful. It was natural to think of the influence of this gland on growth because of its development in early life. But a general survey of the several glands will show that all of these remarkable glands have a common influence on development. And the sudden death, too, apart from suffocation, which has been observed sometimes in thymus hyperplasia is not to be regarded as characteristic without still closer observations.

Our Knowledge of the Pituitary

Of the hypophysis (pituitary gland) one fact is known, viz., that it is frequently found to be diseased in cases of acromegalia. In these, as in all other observations of that kind, there is seen no exclusive symmetrical relation [correspondence], so to speak. There is record of individual cases of acromegalia in connection with which nothing abnormal existed in the pituitary gland, and, again, there are long series of diseased conditions of the hypophysis in which no phenomena of acromegalia presented themselves. When we take into consideration analogous relations in other glands then we shall not be likely to put a deciding value on this lack of correspondence, but the reader is referred to the remarks on the suprarenal glands.

Common both to the suprarenal and pituitary glands is the composition of a number of cells and tissue forms as well as their relation to the nerves. The presence of similar cells in other organs, or at least in other localities of the body, as we find it to be the case with the suprarenal glands we do not find to be true in the case of the hypophysis. Very interesting too, so far as the pituitary gland is concerned, is its relation to the general alteration of bones and to growth. It is true that according to our present view acromegalia constitutes a circumscribed unit of disease by itself, and yet between it and giantism there is a very close relationship. (Compare M. B. Schmidt, in *Lubarsch-Ostertag Ergebnisse*, V. 1898.) A considerable percentage of acromegalia cases show general phenomena of growth-irregularities. And with this we arrive again at what we may call a general relation of all these glands. (Madelung, *Arch. f. Klin. Chir.*, 73, H. 4). Very remarkable is the case reported by Madelung. After a fracture of the skull, which very likely hit the pituitary gland, there was a development of a general corpulency. This calls to mind the relation held by some to subsist between the hypophysis and adiposis dolorosa. But there is need of actual closer observations of facts before the cases are utilized for further theorizing.

The Function of the Adrenals

As to the adrenals we know some fundamental facts. There is a substance in the medullary portion of the adrenals whose constitution we know (compare Stolz, *Berichte d. Deutsch. Chem. Gesellschaft*, 37, p. 4149. Also Friedmann, *Hofmeister's Bei-*

träge, Bd. 8, 1906), and the passage of this into the blood produces a strong local contraction of the small arteries in consequence of which a considerable increase of arterial blood-pressure results. Both effects are of a transitory nature. This body, designated "adrenalin," or "suprarenin," enters—at least in the rabbit— continuously and in demonstrable quantities into the circulation. (Compare Ehrmann [who worked under Gottlieb], *Arch. f. Exp. Path.*, 53, p. 97.) We may therefore arrive at the thought that the maintenance of arterial tension is connected with the function of the adrenals.

But it may well be that this so very important function of maintaining the arterial tension is accomplished both in a chemical and nervous way, and the suprarenal glands with their relations to the nervous system would be exactly adapted for that function—and a twofold regulation is by no means an isolated thing in the organism.

A diseased condition of the suprarenals, especially if tubercular, induces in man a severe general cachexia coupled with an extraordinarily increased proneness to muscular fatigue and frequently anemia. In many cases there occur in connection with these a brown-black discoloration of the skin and mucosæ, either diffuse or in spots. These are the phenomena of Addison's disease. This condition has been absent in some cases where the adrenals were found diseased, while on the other hand the condition has been found existing without diseased adrenals.

Addison's Disease and the Suprarenals

This, however, does not militate in the least against the connection of Addison's disease with the functional disturbances of the suprarenal glandules, in view of the more recent experiences with the system of chromaffine cells. For that peculiar suprarenal medullary tissue, here to be considered, viz., the socalled chromaffine tissue, is not limited to these organs alone, but is found also and particularly extensively in the sympathetic system, and in view of some of the observations now at hand, we might speak of a relation existing between Addison's disease and the functional disturbances of the chromaffine tissue. And this some writers have attempted. (Compare Wiesel, *Zeitschr. f. Heilkunde*, 24. Also *Virchow's Archiv*, 176.)

In this light must also be considered the results of experiments on animals: extirpation of the suprarenals in most instances leads to death, exactly as does the excision of the abdominal sympathetic plexuses, while in addition there occurs a strong arterial hypotonia.

The aim of the experimenter might be the radical elimination of the function of chromaffine tissue. Inconstant results of experimental observations might very well be attributed to the fact that in one case the chromaffine cells of the suprarenals, in another those of the great abdominal plexuses, and in a third series of cases, again, those of other parts of the body stood functionally most in the foreground. How the individual phenomena of Addison's disease, especially the pigmentation, are to be explained is impossible even to surmise.

It must be remembered that the connection of Addison's disease with changes in the chromaffine tissue is not as yet to be accepted as an established fact. The death of an animal after the extirpation of its suprarenals depends on the lack of the cortical and not of the medullary substance of the suprarenals. The cortical substance therefore is the organ important to life, or rather, necessary to life. But the cortical substance has nothing to do with the production of the suprarenin and the chromaffine tissue. And recently it has been reported from Marchand's Institute (Karakascheff, *Ziegler's Beiträge*, 39) that Addison's disease appears only after the cortical substance has been removed to a very considerable extent. Here, then, we still have one opinion opposing another. But it is true that the deductions of Karakascheff appear to me convincing in the highest degree.

Very interesting in this connection is the case of tuberculosis of the suprarenals

in which there were found at the same time swellings of the thymus, thyroid, hypophysis and spleen. (Chvostek, *Lubarsch-Ostertag*, 9 II, p 227.)

The Function of these Glands Not Yet Known

The most important point to find out would be, what task all these glands have to perform in the economy of the organism. It is to be regretted that for the present but a very indefinite opinion is possible. We derive what we know about the glands essentially, on the one hand, from the phenomena of their diseases or their extirpations, and on the other hand, from the phenomena which we observe after introducing the substance of the glands into the body. Even that which we are able to observe is at the present stage of our knowledge not any too much.

In examining the metabolism we observe essentially the kind, quantity, and composition of the end-products which are eliminated from the body. And as in the course of time it naturally grows more and more difficult to discover new end-products, we become limited to the utilization of the quantity and relation to each other of those that are known. Great acuteness is exercised in testing the relations of the end-products after certain definite substances had been administered. This is certainly not to be despised, and for the most of that which we have learned thus far we have to thank those who have created these methods and used them. But taking into consideration all that we have thus acquired, how small a fraction of the metabolic processes actually becomes known to us in this way! The greater part of the intervening processes escapes our observation.

Animal Experiments and Human Observations

And, after all, the consequences of the removal of organs from, as well as the feeding of animals upon, organs, we are able to judge of in but a very crude way, indeed only so far as we are able to observe the life-expressions of the animals by the methods we employ.

Here we meet with the great difference between the consequences of removing an organ either from a human being, or from an animal, and particularly we must note the extraordinary difference between the natural results of a human organ becoming diseased and the results of removing a healthy organ from an animal. A difference may consist already in many respects in this that the influence of an organ when it becomes diseased is not entirely and at once done away with, or at least not entirely so. The difference may probably also be in this that in becoming naturally diseased there are the various phenomena of irritation along with those of defect. The most important of all the many differences I would consider to consist in this, that the human being as an object of observation is of an altogether other variability than the animal. Here, then, clinical observation comes into its rights: the examination of a human being, whose life-expression we know so intimately, opens up with comparatively simple means and under certain circumstances the possibility of observing finer and more variable disturbances of vital processes, I do not say of knowing them. One is ever anew surprised by the fulness and extraordinary variety of the complexity of symptoms with which most diseases present us every day.

These differences have in more than one respect been regarded as a hindrance to a comprehension of disease, inasmuch as those simple, clear conditions which experimental pathology shows us on the animal are not encountered at the bedside. Many an unnecessary misunderstanding between experimental pathology and clinical medicine has thus been created by this apparent disagreement.

How, then, shall we understand the great variability of phenomena of a diseased condition in which those clinical correlations of organs come to be considered?

The chemical and physical processes which are enacted in the individual cell

are of a hardly imaginable complexity. Hofmeister gave an excellent picture of it in a lecture intended for the Congress of Scientists. (Hofmeister, "Die Chemische Organisation der Zelle," 1902.)

The factors which result from these processes are, for the most part, if not exclusively, to be regarded as ferments. I use this expression in a purely biological sense without wishing to say anything concerning the chemical position which the substances to be considered may occupy. What concerns us here is the fact that the cell accomplishes its varied and grand results by means of those mysterious processes which we designate as fermentative.

The carriers of these effects originate in the living substances of the cell, and are parts of itself. From all that we now know of them they represent in each cell not anything new and unchangeable, but they themselves undergo modifications. They are formed in and by the metabolism, and their quality depends on the one hand upon the qualities of their own living substance, and on the other hand on the substances that come to and enter into them. This is that mystery, that wonder, that the instruments which the cell needs for its existence it creates itself for itself, and they become fitted for the task which they have to solve.

We are certainly permitted to draw a close parallel between the processes that go on within the cell and those which we know to go on with the unformed ferments. For example, we know of the pancreas how far the secreted ferments depend upon the kind of substances that are found in the digestive canal and which are to be elaborated by these ferments. The same relation pertains between the enzyme forming within the cell and the nature of the substances that enter into it.

The Reaction of the Cell to Other Substances

There is therefore a teleological factor in the reaction of the living cell upon everything that enters into it. This fact has been variously explained. Thus I recall Ehrlich's ingenious theory, and also that of Hans Buchner, who endeavored to explain the exceedingly fine adaptation of the products which are delivered by the cell to the substances which are to be elaborated by saying that those products were formed out of those substances. This idea of Buchner would be worth while, just at present, to be considered again, for the views now of the things that enter the cell have notably changed. Formerly it was assumed that the albumin was delivered as such, or at least in a highly organized condition, to the living cell. Now, however, we put the synthetic capacity of the cell in the foreground and conceive the same as building up its own substance out of profoundly sundered fragments. Hence the idea lies very near that the far-reaching specificity and adaptation of ferments to food, and of antitoxins to toxins, rests upon this, that individual groups of the latter enter the former. (Compare the important labors of Bang and Fossman, *Hofmeister's Beitraege*, Bd. 8.)

However this may be, the fact of adaptation is certain, and with this admitted, the variability of cell-ferments. But even this granted, there is not as yet adduced sufficient guaranty for a sufficiently extensive and varied effect. There must in addition inhere in every fermentative process the capacity of being interrupted after a while, or let us say advisedly, "at the necessary time." The fact is that in all these processes certain inhibiting substances play a very important role.

The ferments themselves originate, as numerous experiences have taught us, mostly not in the cell itself but through a sort of inactive preliminary stage, as a proferment. They need, before they can enter upon their function, some special impulse, the socalled activation. Thus then the processes of the cell would consist uninterruptedly in formation, activation, inhibition and reformation of their effective material. Herein lies the automatic self-control of the living substance.

But neither the individual cell nor the individual tissue of the living higher organisms can, so far as we know, exist by them-

selves. For creating its instruments of fermentative substances for the elaboration of the nutritive materials that enter the organism the cell needs the products of other cells. The tissues of the higher organized animals are unavoidably depending for their existence upon their working together with one another. We know well, for instance, from our experience with ferments of activating and inhibiting substances that very often they originate from other cells. Among these may be mentioned pepsinogen and hydrochloric acid, pancreas ferment and enterokinase, thrombogen and thrombokinase. We may say in the words of Pflueger, the automatic self-control of the highly organized animal body rests on the cooperation of its tissues.

At different periods we have held different conceptions of the chemical correlation of the various organs. According to the first assumption the belief was that this correlation was limited to this, that a tissue furnishes a well-characterized substance which another tissue needs for its own construction and demolition, or say, for its function, as for instance the glycogen which furnishes the work in the muscles originates in the liver and from it is delivered to them. But now the view seems to be gaining that the cooperation of different tissues is equally as enormously complicated as the life- and chemical processes are in the individual cell. The idea of simple formulæ must be entirely abandoned. At the present attention is held rather by substances that are formed in one kind of a cell and which act in another cell upon its fermentative processes in modifying, activating, stimulating and checking them.

How Organs May React Upon Each Other

In this assumption there is given, of course, plenty of opportunity for change in the normal processes of life. We must not think that when a substance furnished by one cell for another has not the usual composition or structure, the chemical processes in the cell in which these substances participate are at once interrupted. The morbid deviations of the bodies under consideration may frequently be such that the normal and the altered products stand decidedly near each other. They may differ perhaps only by the difference of a few atom groups. This we may suppose or conclude from our frequent experiences with the processes of immunity. In that case these substances, in spite of their altered condition, naturally enter into reaction with the like cell-substances as would their normal correlates. Only that the result will be another, more or less, than the usual one. In this way there is opportunity, when changes occur in one organ, for changes and transformations of biologic processes in numerous other organs. The number of combinations and complications is enormous. In this way the vital processes in one organ may be modified in a great many ways, be it on account of various causes of disease, or even on account of varied onsets or intensities of one and the same cause of a disease. Their modified products act, then, upon other organs in a modified manner, and through the cooperation of the cells as well as through their ability to shape and change what they are constructing, according to that which enters into them, we have now entirely different cell-functions running their course in an entirely different way.

These hypothetical assumptions may make more easily understood the seemingly inexplicable phenomenon that the same disease-unit and disease-cause can give rise to such extraordinarily changing and ever new clinical aspects. The diagnostician and physician can never cease to be astonished at the fact that no one patient equals another, and that a comparatively small number of diseases should present daily new and so often insoluble riddles.

What are "Personal Peculiarities?"

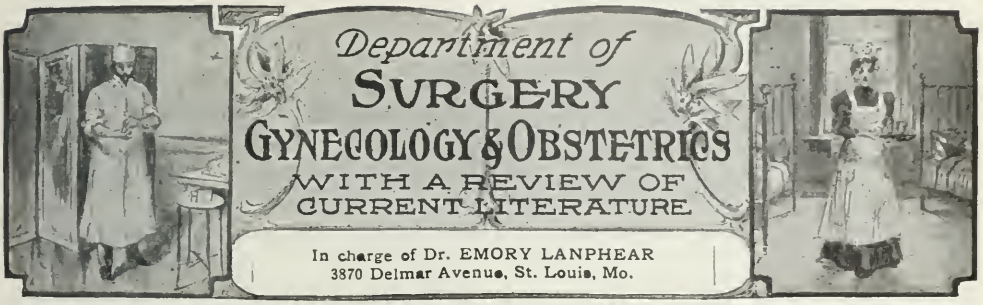
Much is attributed to the personal peculiarities of the individual. But what does this mean biologically? Evidently it is not only every species that has its own chemical structure but every individual as well. When now the cell-ferments de-

pend in their finest structure upon the conformation of the living substances, so has every individual also his own intermediate metabolism in the above sense; that is, there may be in every individual certain, though not specific, chemical peculiarities. Some experiences with the precipitins will permit of interpretation in this sense. So some definite cause of disease, so far as it interferes in a chemical sense, may already give rise, as a consequence, to variously shaded phenomena in the primarily altered tissue. But this will be first of all the case with secondarily diseased organs, because they stand first in chemical relation to the altered tissues, as described above. We might think here of even a geometrical progression if a number of pathologically altered products reacted upon each other. And if anyone should object that the apparent uniformity of the metabolism in the several animals of the same species militates against this conception, I would remind him that isolated experiences have at any rate already been made in animal physiology which raise doubts as to this uniformity. And for the human being the thing is probably of still greater concern because in time the individual diversity is still greater than in the animal. If this be valid, then there is opportunity for an extraordinary polymorphous aspect of disease, for the above-mentioned factors make themselves felt in every tissue, and they are repeated in the cooperation of the different tissues.

It will therefore be understood that the absence of the same organ or its deficient functioning in different individuals may lead to symptoms that are on the whole similar, and yet differing in some particulars. More especially will this be the case where the functions of the organ in question are quantitatively and qualitatively interchangeably disturbed in different individuals.

Then, too, it could be understood how it is that the disturbance in the functions of these various glands might under certain circumstances evoke quite similar phenomena. And we have already noticed in the preceding considerations that the influence of all these glands on the general nutrition and on the condition of some organs, e. g., skin and bones, shows an entire series of features that are related to each other. Very striking, for example, is the ease and frequency with which the katabolism of the carbohydrates become disturbed when any of these glands become diseased. Later on we shall have to expound the phenomenon of glycosuria as the classic symptom of the extirpation of the pancreas. But we also find sugar in the urine comparatively frequently in altered states of the thyroid, hypophysis and suprarenals, and the relations are here partly to the alimentary glycosuria *e saccharo*, and partly to spontaneous glycosurias, and so, in our present view, to diabetes mellitus. When we see in what intimate connection the organs stand to each other, in what complicated manner they act upon each other, then it is supposable, the assumption would even be strong, that when one of these organs becomes diseased then certain changes will regularly take place in the others. Thus, for instance, the bone lesions which develop in the wake of the diseases of these glands can be at one time direct results of a disease and at another time an indirect result in various respects.

[To be continued.]



POST-OPERATIVE PERITONITIS

Conditions which favor its production, the curative measures possible—and the one of choice; with a description of the operative technic and the post-operative treatment

By EMORY LANPHEAR, M. D., Ph. D., LL. D., St. Louis, Missouri
Professor of Operative and Clinical Surgery in the Hippocratean College of Medicine

PERITONITIS is a localized trouble, and is essentially life-saving when not too extensive or severe: the adhesions formed thereby serving to limit the spread of suppuration. That which is commonly called "general peritonitis," with its vomiting, collapse and death, is acute sepsis of the most serious type.

But sometimes the peritoneal surfaces do not agglutinate around a point of infection—as a typhoid perforation, a gangrenous appendicitis or a pus-tube—and the general peritoneal cavity becomes a huge absorption-sac, so that the system is speedily overwhelmed and death from poisoning of the heart-muscle, with true "heart-failure," quickly supervening—unless the surgeon has the courage and the skill to act promptly and properly.

Basis of the Calomel and Opium Treatment

These are the cases formerly treated by Sir Andrew Clark with calomel followed by opium—the idea being to paralyze the bowel so that protective adhesions may form; a practice still advocated by some who are not familiar with intraabdominal pathology. With this line of treatment it is common to order hop poultices, turpentine stupes, Credé's ointment, cataplasm of kaolin, ice-bags, etc.; all of which tend to comfort the patient's mind and afford relief to the anxious friends who want to "do something," but have only little if any effect upon the morbid process save to hasten spontaneous rupture of an abscess about ready to break through the skin.

The truth is, there are but two curative measures possible: to remove (or render less dangerous) a source of local infection, and to rid the peritoneum of the infective material already poured out into it.

It is true that in a large proportion of cases the peritoneum affected is of but trifling extent (as around the appendix or in the pelvis where absorption is excessively slow, the stomata being very few as compared with the dangerous areas like the diaphragmatic peritoneum) and adhesions prevent the dissemination of the poison. However, when symptoms indicate that the protective barrier is not being thrown out, there must not be any delay. This rule is applicable alike to appendicitis, to salpingitis, to cholecystitis and to intestinal obstructions; it is imperative in all penetrating wounds of the abdomen, in ruptured gall-bladder, in perforation of gastric or duodenal ulcers, in leakage

of pyosalpinx, in volvulus, and even in the giving way of the intestine in typhoid fever—practically all certain to end in death unless quickly and skilfully remedied.

When there must be some delay in operating, the patient should be kept in the Fowler position: the head of the bed raised upon a chair so that all of the infected fluid in the belly will run into the pelvis where absorption is slow.

Conditions Favoring Postoperative Peritonitis

Now, all this applies with extra force to postoperative peritonitis. Here the surgeon expects serous surfaces to adhere, in order to cover the line of incision and the wounded surfaces. If the work has been performed aseptically, a noninflammatory adhesion will follow, completely burying all exposed and injured surfaces; and results will usually be satisfactory. But if (1) pyogenic bacteria have been carried in by dirty fingers or non-sterile gauze or instruments, or if (2) some pathogenic conditions have been found which cannot be entirely excised without soiling of peritoneum, or if (3) some viscus has been so injured that it may discharge infective contents into the peritoneum, a general infection of the peritoneum may occur, with speedy death.

Now, following the abdominal operations there are certain disturbances which are practically normal: slight rise of temperature, vomiting, pain, etc., yet which if continued, clearly indicate serious peritoneal infection; so the question of greatest import is: What are the signs pointing unequivocally to peritoneal infection?

The Signs of Peritoneal Infection

The first and foremost symptom is vomiting. When the bile-tinged water changes to a greenish brown and when the straining of anesthesia-emesis is succeeded by practically effortless vomiting (not immediately and permanently relieved by washing out the stomach once) there can be no doubt of serious sepsis, and delay in proper treatment certainly means a fatal termination.

Accompanying the foregoing is persistent refusal of the bowels to move, not even gas escaping. With this absence of peristalsis comes distension of the abdomen: tympanites. If under the most vigorous purgatives, supplemented by high enemata, no bowel-movement can be induced, the experienced operator does not hesitate to open the belly for the purpose of correcting the disease, if possible—he who waits until stercoraceous vomiting appears never saves a life.

The temperature-behaviour is peculiar: there is rarely much fever, the very worst cases having a subnormal record. But if there be a fever above 101° F. it is corroborative (merely) of the other signs.

If now, to the exhibition of persistent vomiting, tympanites and paresis of gut, there be added a knowledge that there is strong probability of something wrong inside—as a failure to provide drainage in a doubtful case, the likelihood of a leakage from an improperly closed opening in intestine or gall-bladder, too free oozing into the pelvis from torn adhesions, uncertainty as to perfect aseptic technic during operation, etc.—the surgeon ought scarcely to hesitate about the justifiability to reopen and clean up. Yet even the most experienced surgeons do hesitate in this matter, often "hoping against hope" until it is too late.

The Preparation for Operation

As soon as it has been decided that reopening the abdomen is necessary, an injection of one tablet of the hyoscine-morphine-cactin anesthetic is to be made (hyoscine gr. 1-100, morphine gr. 1-4 and cactin gr. 1-67); by the time instruments and hands are sterilized the patient will be so sleepy that but a few drops of chloroform will be needed—a matter of great importance because the patient is already so weak and nauseated; besides, it induces a desirable condition of tranquillity after the work is done. In case the patient is too weak for an inhalant anesthetic the work may be done with one hypodermic injection plus cocaine anesthesia locally;

but it is best, when possible, to have the patient oblivious to what is being done.

Invariably before beginning the operative work the stomach must be washed out with salt-solution.

The belly should be opened, with two objects well defined in the mind of the surgeon: (1) to clean out the abdominal cavity as speedily and perfectly as possible, and (2) to locate and correct quickly the source of infection; or if not possible of correction, to afford perfect drainage.

Cleaning out the Abdominal Cavity

1. To attain the first object, one must be guided by the conditions present as to method. (a) When the infection is presumed to be general, and dependent upon faulty technic (dirty hands, instruments or sponges) probably the best procedure is to open widely the wound and pour in large quantities of normal salt-solution, temperature of 102—105°F., inserting a hand first into the pelvis and separating the coils of intestine so that irrigation may reach all parts of the lower abdomen; when that has been effectively flushed, the hand and the solution are to be turned toward the diaphragm and the upper part of the abdominal cavity is washed out with even more care than that bestowed upon the lower tracts where absorption is not so active. From one to ten gallons of salt-solution may thus be used, continuing the stream until all flocculi or tinged serum seem to be removed.

In this process of irrigation a large rubber tube with a funnel is the instrument of choice, as the tube can be carried to the depths and the infective material thus be thrown out much more easily than if a pitcher be used and the fluid merely poured in and allowed to run out.

(b) The same method is best when there is intestinal perforation with large outpouring of fecal matter.

(c) When the trouble is due to accumulation of infected serum in the pelvis (as after removal of a uterine fibroid, without drainage) the pelvis only need be irrigated, and it is best to have the patient in the Fowler ospition during the cleansing so that the infectious material be not spread over the non-infected peritoneum by flooding of the upper abdomen. In such cases it is best to dry thoroughly the pelvis and then pack loosely with gauze (left protruding through the wound), pulling the omentum well into the pelvis and tucking it in around the gauze between it and the brim of the pelvis.

(d) When the infection is presumed to be merely a localized one, as at the site of pyosalpinx just removed or a recently excised appendix, it is better merely to wipe the peritoneum dry, especially the pelvis and the spaces just below each kidney, where infected serum is prone to accumulate, and insert drainage.

Locating the Source of Infection

2. When the source of infection is known to be a local one, as (a) a leak from the stump of an appendix, (b) a perforation of gut (quite likely to occur when extensive adhesions between coils of intestines have been broken up), (c) failure to form adhesions around a drained gall-bladder or other infected part, (d) oozing from torn adhesions, (e) contamination by urine through a torn ureter or around a ligature or suture passed into the bladder by mistake, or any other cause, the first duty of the surgeon is to seek this local trouble and correct it, if possible; if not, then to irrigate or clean by wiping, and then drain.

In the process of wiping, great care must be exercised not to do harm to the peritoneum. Soft pads of gauze should be used, wrung out of the hot, normal salt-solution already at hand for irrigation, if indicated. Pus and flakes of fibrin adherent to the intestine must be carefully removed, but not enough force should ever be employed to make the musculosa bleed—for the serosa often has to be removed with the fibrin if an attempt be made to get all. (It is best to take away only that which comes away easily.) As each loop of intestine is cleaned it should be slipped back into the belly and held there, gently, by means of a hot, moist towel or large pads of gauze.

In rare instances, when the source of infection is in the pelvis, it is advisable to

clean the abdomen (and especially the pelvis) as thoroughly as possible and then put the patient in the Trendelenburg position so that all of the intestines are thrown well out of the pelvis, then again clean the pelvis—particularly the depths of the cul-de-sac of Douglas (which can not well be cleaned with the patient lying flat upon the table) and then quickly pack the entire pelvis with gauze, not very tightly, and hastily return the patient to bed.

As a rule no attempt should be made to suture the incision; one or two through-and-through stitches may be introduced if the cut is unusually long; but in general the dressings supported by two or three adhesive straps and a binder will keep the sides of the wound in close contact with the gauze.

Extreme care must be taken not to have the retaining straps or the binder so placed as to interfere with drainage, for in free discharge of fluid lies the hope of saving the patient.

As soon as the patient has been returned to bed the most vigorous measures must be instituted to tide him over through the next few hours—until protective adhesions can be formed. These are:

1. *Hypodermoclysis.* A quart of normal salt-solution should be thrown into the cellular tissue below the breasts. It may be repeated in four or six hours if indicated—the buttocks being selected for the second injection.

2. *Application of Heat.* Hot water-bags, or bottles, must be applied to the extremities just as in the treatment of shock.

3. *Hypodermic Stimulation.* If the pulse is imperceptible, camphorated oil should be injected. In a few minutes a hundredth of a grain of glonoin may be thrown under the skin. And in a half hour one-twentieth of a grain of sulphate of strychnine may follow. This may be repeated in an hour if the pulse flags again.

4. *Enemas.* Six or eight ounces of black coffee with one ounce of whisky may be thrown into the rectum as soon as possible after operation. As soon as it is seen that the patient will not die from shock, one milligram (gr. 1-60) of salicylate of eserine should be injected hypodermically, every hour until four doses are given; this starts the peristaltic wave downward and acts as a decided nerve-sedative.

Then one milligram of elaterin (*not* elaterium) may be given by mouth, with a little sup of water, every hour until six doses have been taken. If retained, this will usually cause free, watery discharges from the bowels.

6. *Internal Medicines.* As soon as the stomach will retain anything of bulk (i. e., about the time of the last dose of elaterin), stimulants may be begun; teaspoonful doses of iced champagne every 15 or 20 minutes being the best. If the patient go to sleep he should not be disturbed for this.

If vomiting occur the stomach must once more be washed out. One lavage will often afford perfect relief from the distressing nausea and the profound depression. Indeed, it often seems to do more toward securing a favorable ending than all the other measures together.

THE scientific ideas which rule the minds of scholars at various epochs have all the solidity of religious dogmas. New scientific truths have, assuredly, experience and reason as a basis, but they are only propagated by prestige—that is, when they are enunciated by scholars whose official position gives them prestige in the eyes of the scientific public. Now, it is this very category of scholars which not only does not enunciate them, but employs its authority to combat them.—Dr. Gustave Le Bon.

EXPERIENCES WITH APPENDICITIS

Why early appendicitis is often overlooked, with a description of some of the symptoms which should attract the physician's attention. With a report of the author's experience

By P. S. McINTOSH, M. D., Spencerville, Iowa

TOO often cases of appendicitis are overlooked until the later and more dangerous stages; while probably more frequently cases of accumulation of flatus, acute constipation, etc., are labeled inflammation of the appendix. Therefore the symptoms of appendicitis cannot be looked into too closely. The careless physician, upon being called to a case of pain on the right side, almost invariably says "appendicitis," and in many cases no doubt the patient has given him the diagnosis when he approached the bed.

The Symptoms of Appendicitis

What are the symptoms of appendicitis? We say pain or tenderness at McBurney's point, irregularities in temperature, pulse or bowels, generally vomiting or retching or nausea, with great prostration. It is the "attractive" symptom, pain, to which I wish to draw attention at this time.

First, the situation of the pain: This depends altogether upon the stage of the disease and the character of it. In very acute cases, following irritation or slight traumatism, in early stages (within the first twelve hours as a rule) the pain is referred to the umbilicus (and about one inch above it), to the head and stomach. This is explained anatomically from irritation of the nerves of the great omentum and reflexly to the inferior mesenteric plexus.

If the patient's head were all right he feels he would be well, and probably sends to the druggist for some migraine tablet in advance of the doctor's visit. He is seen in the evening. He is retching and vomiting, with tenderness over the whole abdomen. Next morning he has a peculiar, very tender spot over McBurney's point. His vomiting is easing down and he is very particular about the position of his right leg, generally keeping it drawn up, but if there is much obesity, straightened out. If his bowels have not moved he is soon given an enema, with the result that this increases his pain. He begs for morphine, cries out until the hypodermic needle has been used. He cannot urinate, although his bladder is distended, because of the pain it gives him.

Next day or that evening he again becomes tender, pretty much over the entire abdomen, but this tenderness, or rather soreness, is of a different type from that of the third stage; bladder and bowel seem more completely paralyzed.

Now, what does this indicate? From a series of cases I have learned that such a patient is having his first attack, a very acute one, the inflammation at first being quite general; in the second stage it has settled down to abscess-formation, while in the third there is some leakage and consequently peritonitis has developed. A consideration of pulse, temperature, etc., would aid in excluding, possibly, gangrene.

The Recurring Cases

In recurring cases there is a continual soreness, with periods of localized pain augmented by exercise, due to adhesions that have formed during some previous attacks. Pain often is greatest in the leg, due to irritation of the anterior crural nerve mechanically. As the appendix is in contact with the ureter and its nerves form the renal and spermatic plexus, paralysis and pain over the bladder are thus brought about.

In one case which was brought under my observation, after a huge abscess had been tapped, drained and healed up, the patient complained of pain along the base of the right lung, but nothing could be made out

upon examination, so the attending physician referred to it as postoperative pain due to destruction of some nerve of which I never got the name. In a few days the patient coughed up a large amount of pus, a rib was resected, and a director passed under the lung where a huge abscess was discovered. The patient died of exhaustion a few days afterward. Examination of the pus by the bacteriologist discovered actinomyces. There were evidences of multiple foci in the liver and other parts of the lung. It would be a capital idea for surgeons to send all suppurative appendices to the bacteriologist. Had it been done in this case the lung-pain no doubt would have been explainable.

THE MUSCLES OF THE MOUTH

How their misuse may mar the expression and appearance of the features, with a description of methods of operative treatment, as practised by the author

By CHARLES C. MILLER, M. D., Chicago, Illinois

HOW often do we see the "Cupid's bow" in the woman past thirty or in the man past forty? The only excuse for asking such a question is that by answering it I can emphasize the fact that we very, very seldom see it, although we should. Men and women are continually twitching their features to display the slightest of emotions. This display of emotion becoming a habit, the features are drawn out of shape by the overuse of the muscles and people grow old many years before they should.

In this brief paper I wish merely to call attention to the muscles about the mouth and their effect in destroying all claims for beauty of this part of the face.

Importance of Featural Surgery

The subject of featural surgery cannot longer be disregarded, and the profession cannot appreciate too rapidly that a demand has been developed by the press of the country for physicians who can advise intelligently as to the care of the skin and its preservation, and surgeons who can operate skilfully for the relief of featural imperfections.

For a number of years I have been giving the subject of featural imperfections considerable attention and I feel that the time has come when the profession must recognize the demand for men capable of operating intelligently upon imperfect featural states, and I hope to be of service in explaining various operations which I have found useful in this class of surgery.

Hardness of Mouth Expression

One of the most common alterations of the appearance of the mouth with advancing years is the development of a certain hardness of expression. This is due to a slight general contraction of the facial muscles about the mouth. The lips are more or less compressed and the person, by indifference to this compression and mimicry of those about, destroys the youthful bow-lines which might otherwise remain for many years.

Many people not only slightly compress all the muscles about the mouth but also contract certain groups more than others. We have a group of muscles which advance the lip in the median line below.

These muscles are brought into action particularly where there is a feeling of more or less despondency. The advancement of the lower lip in the median line is accompanied by a slight contraction of the orbicularis oris muscle surrounding the mouth and the muscles of the angle, so that the corners of the mouth turn downward. This downward turning of the

angles gives, of course, in extreme cases the appearance of sadness, but we see it in people of middle life and do not associate it thus, for the corners have been drawn down gradually and have remained so long in this position that, whether they be glad or sad, the angles are deflected.

Women dread the development of this condition of the oral angles and frequently consult for relief after the habit of muscular contraction has become fixed and the muscles have been so long contracted that simple training cannot overcome the con-

SUBCUTANEOUS SECTION OF MUSCLES
A—At Angles of Mouth. B—Of the Chin Muscles

dition. In young women I am in the habit of insisting that they watch themselves and prevent this habitual overuse of the muscles about the mouth, and I also have them practise before a mirror exercising the elevators of the angle of the mouth. It is remarkable what control some acquire over these muscles by such exercises.

Subcutaneous section of the muscles of the lips which are used to excess, I have practised and believe it has been of distinct value in the treatment of these cases.

Sectioning of the muscles of the face with a view of diminishing their action is a logical means of treatment, for we know quite well that the paralyzed side of the face loses its expression lines. By section of the muscles of the face we cannot hope to overcome their action entirely, for these muscles are too intimately connected with the skin to obliterate their action by section unless we should cut off their nerve-supply. Of course we do not desire to paralyze both facial nerves, for that would be carrying featural surgery to an extreme which we could in no way justify.

The section of the muscles of the lower lip, or those muscles which elevate the lower lip in the median line, produces but a slight effect upon them. Their action is not destroyed, merely diminished, and as the operation is easily performed, I recommend it for improving the appearance of the mouth which has been marred by compression and downturning of the angles. With the section of these muscles of the lower lip a section of the orbicularis at each oral angle is advisable.

How the Operations are Performed

These operations are performed subcutaneously through punctures made within the mouth. The narrow blade of a cataract knife may be entered within the angle of the mouth. It should be carried directly outward until it is beyond the bundle of muscular fibers which may be felt with the index finger and the thumb of the operator and then these fibers are carefully severed. The procedure is repeated upon the opposite side.

Infiltration is desirable before sectioning these fibers at the external angle of the mouth. For sectioning the muscles of the chin a rather extensive infiltration is advisable, then the operator passes his knife through the lip and downward. If the subject contracts the muscles it will assist the surgeon slightly, otherwise he should pick them up between the index finger and the thumb. The knife is made to traverse a fan-shaped area through the tissues of the chin, and if the operator has judged

correctly, division of the muscles should be accomplished. Of course an absolutely complete section of these muscles may not be secured by this operation, but in my own experience it has apparently been of decided value in overcoming the faulty overaction of these muscles and is of undoubted cosmetic value.

HYOSCINE-MORPHINE-CACTIN ANESTHESIA

An experience with different anesthetic combinations, and the reasons which led to the final adoption of the original formula; with a description of the technic which has given the best results.

By F. E. WALKER, M. D., Hot Springs, South Dakota

HAVING used hyoscine and morphine as an anesthetic in over three hundred cases, and having used it under varying circumstances, sizes and combinations, I herewith give a brief resume of my experience.

In a paper read before the Missouri Valley Medical Society, at the last meeting held in Omaha, I gave a detailed report of the use of the hyoscine-morphine-cactin compound. One of the conclusions reached at that time was, the advocating the use of a compound in which the hyoscine was reduced to gr. 1-150 and the substituting of strychnine, gr. 1-45, for the cactin. This combination I have used in twenty-three cases, sixteen major and seven minor operations. It was disappointing for the following reasons:

1. More chloroform was required.
2. In the majority of patients it did not tend to cause relaxation.
3. Patients did not take the anesthetic well, as they appeared to be alert, watchful and active. This was attributed to the lessened amount of hyoscine and the stimulus of the strychnine.
4. Postoperative pain was not lessened.
5. In eighteen patients there was postoperative emesis.
6. In no instance was I able to make an incision without causing pain, until the patient was completely anesthetized with chloroform. My anesthetizer who had heartily sanctioned this combination became disgusted with results and advised the return to the original tablet of hyoscine-morphine-cactin. This was at once put into effect and the results were so satisfactory as to justify us in following out the routine of producing surgical anesthesia as noted below.

Preparation for Operation

The patient is prepared with great care in the thorough cleansing of the stomach and intestine, especially in all abdominal sections, by the administration of calomel two days before the operation, and saline laxatives. The lower bowel is flushed with sterile normal salt solution several times and the night before the operation a large dose of oil is given, and early on the next morning the lower bowel is flushed again. During the treatment outlined no solid food is allowed. Milk and water, both sterilized, are given.

Previously we administered the tablet forty-five minutes before the hour set for operation, but we find much better results are obtained if the tablet is given one hour before the operation. In a few instances we have administered a second tablet forty-five minutes after the first tablet, but the results have not been at all satisfactory, as it has caused considerable worry on my part; and in a few patients whom we thus treated it was necessary to give just as much additional anesthetic as where only one tablet was used, therefore we have entirely eliminated any attempt to perform any operation, major or minor, in which chloroform is indicated, by the hyoscine-morphine alone.

The splendid results obtained under the method we now use are so satisfactory that we cannot ask for anything better. The attempt which is being made by many to produce anesthesia with this compound alone, is not as safe and sane a course as to merit universal approbation, though I do not question it can be accomplished; but the risk does not justify whatever claims in its favor may be proposed by its supporters. In almost all reports wherein a heavy dosage is advocated, an additional anesthesia is usually necessary to give at some stage of the operation; then why should we take a chance when we can obtain the same results with one tablet and about the same amount of chloroform?

A closer mask is used in giving chloroform, i. e., a mask similar to the Esmarch inhaler, but completely covered with metal, except a rectangular opening one-half inch long, in the top. No more air is allowed the patient than can be thus obtained, while the chloroform is being given. A graduated chloroform dropper, completely under control, is used. We go on the theory that as oxygen is the natural antidote to chloroform, it should be excluded and painstaking care used in giving chloroform in minute drops at intervals, but have each drop do its duty. After the incision is made through the skin the chloroform is discontinued and only used as the surgeon indicates. Thus we are enabled to perform an operation, nicely, safely, and with very little chloroform. As a result of this method, the giving of the tablet one hour before the operation and the slow measured interval administration of the chloroform, we find:

1. The patients have no fear.
2. Many come to the table so nearly asleep that after the operation they have no remembrance of the act.
3. Postoperative pain is rare.
4. Postoperative emesis in less than 5 percent.
6. Pulse-rate will not vary over six beats.
7. The respirations are slightly lowered.
8. Amount of chloroform is a matter of drops.
9. No time is lost after the patient enters the operating room.
10. The method is safe, conservative and eminently satisfactory.

LACERATIONS OF THE CERVIX UTERI

A discussion of this very common condition with special reference to its intelligent and successful treatment, prophylactic, medical and surgical

By D. E. DeNEEN, M. D., Cincinnati, Ohio

THIS is one of the most common and interesting pathological uterine conditions. Its importance is not recognized as it should be. Lacerations are not only surfaces for infection (before healing) but are the causes of many pathological conditions among our suffering women.

The literature is comparatively recent. In 1851 Sir James Y. Simpson recognized that it was common in first labors. Roser in 1861 wrote of ectropion of the cervix without knowing its meaning. To T. A. Emmett we are indebted for the discovery, in 1862, of its full meaning as well as its remedy.

As late as 1889 Lawson Tait was not convinced. He held that metritis was the cause of subinvolution; that nothing more useless than the Emmett cervical operation had ever been invented. Time, which proves all things, has proven him wrong. I have searched through numerous volumes, old and new, without finding a line to support Lawson Tait's opinion.

Bennett believed, in 1853, that ulcerations resulted from lacerations. In fact the older writers commonly supposed that lacerations were only ulcerations. In former times the cylindrical speculum was much used. No

doubt it was, as Playfair held in 1883, the cylindrical speculum which was responsible for overlooking the lacerations.

One case of erosion of the cervix was seen by Fischel in an infant.

The Importance and Etiology of Lacerations

Emmett wrote: "Its importance can not be exaggerated, since one-half of the ailments among those who have borne children are to be attributed to the lacerated cervix."

Scheurer found in an analysis of 99 cases that more than 50 percent of extensive lacerations were from instrumental deliveries.

A large head, large child, rapid and induced labors, small cervix, and early rupture of the membranes are causes. In these days of small families, how many lacerations must result from the abortionists' instruments? Frequently the uterus must be dilated with instruments and a curetment done in order that the lives of these patients may be saved. How many deaths result every year and how many suffering women there are from this criminal operation! Yet we go on year after year and allow such things to be done.

In 2500 parous women who had given birth to one or more children, 25 per cent of well-marked lacerations were found by Mundé. He found that less than 50 per cent of these needed treatment.

Pathology and Pathogenesis

Cervicitis, endocervicitis, endometritis, metritis, parametritis, subinvolution, salpingitis, ovaritis and general pelvic inflammation may result from laceration. Laceration is a surface for infection; and the cicatricial tissue resulting therefrom causes a nervous irritation. The pathology will be in accord with the writings of Emmett, Byford, Henrotin, the late Dr. Fowler, Ochsner, Thomas, Mundé, and others of the day; except perhaps the irritation of cicatrical tissue. I must not forget to say that pelvic abscesses, neurosis and cancer may result.

Kelly recalls only three cases of cancer in nulliparous women, and in one of these the cervix had been forcibly dilated. He writes that Emmett told him he had only one nulliparous woman with cancer and that she had been forcibly dilated. Today it is held by our leading surgeons that scar tissue predisposes to cancer. The uterus heads the list. Therefore traumatism of the cervix and scar tissue predispose to cancer. With these facts would it not be well to teach one's patients that a woman who has borne children should be examined about every six months to see if her pelvic organs are healthy? Since the laity are a few centuries behind the times we should not expect to get immediate returns. But we can help educate. To bring this home a little stronger, John G. Clark says that 65 per cent of these cases of uterine cancer are turned away from one of our large hospitals because they come too late.

Degrees of laceration vary from small stellate forms to those extending almost to the vaginal vault. Lacerations on the inside of the cervical canal, or those which are healed over, or where the muscular fibers are broken without a tear of the mucous membrane, are only diagnosed by the examining finger. The former may not even then be diagnosed unless the uterus is subinvoluted or dilated.

The Symptomatology

This will vary according to the complications. Some patients have no symptoms, others lose their health after confinement, lose flesh, become nervous, hysterical, and some bedridden. The pelvic organs are tender. I shall not go farther into detail.

Treatment

This resolves itself into three kinds, viz.: (1) prophylactic, (2) medical, (3) surgical.

1. Prophylactic Treatment: Retard rapid labors. Don't use forceps unless there is a reason. In legal abortion, if dilation must be accomplished mechanically (with instruments), do so slowly. Use lubricant if child is at four months. If cervix is lacerated in dilation for curetment, repair immediately after curetment. (In labor-cases, however, not immediately, unless there is

severe hemorrhage.) Douches of hot sterile water are all that is necessary in clean lacerations, until a later stage.

2. Medical Treatment: Hot sterile douches for recent cases. Tonics, laxatives. Recent cases granulate if not too extensively lacerated. Acetate of lead or sulphate of zinc dissolved in water will help to reduce inflammation in old cases. Sims first used glycerin on a tampon. In many cases we can use, with good results, boroglyceride with 25 per cent ichthyol in glycerin. Compound tincture of iodine and depletion with bistoury also do good. The same is true of the galvanic or faradic current, single or combined.

3. Surgical Treatment: In 1862 T. A. Emmett devised the operation which bears his name. He reported this operation in 1869. Before any operation of repair the patient should be placed in bed for ten days and given hot douches and have tampons of glycerin with 25 per cent ichthyol applied. For years before lacerations were recognized the cervix was amputated. This operation was done with the knife, cautery and ecraseur, the stump being left to granulate. There must have been many cicatricial contractions and much suffering as the result. Sims, in 1859, first covered the cervix with vaginal mucous membrane. This was not only a long stride in cervical surgery but a very good thing for humanity.

Emmett does not favor amputation of the cervix unless it is enlarged or undergoing degeneration or looks as if it might become cancerous.

Montgomery gives as indications for amputation: (1) elongation, (2) hypertrophy, (3) eversion and extensive hyperemia, (4) incipient malignant degeneration.

Fowler advised amputation in hypertrophied and hypertroplastic conditions after palliative measures have failed.

Ochsner mentions no other operation in his textbook for lacerations of the cervix. I have visited his clinic and have seen him amputate for cervical lacerations. The advantage of amputation is that it removes all scar tissue and, in fact, all the diseased tissue, leaving in its stead a healthy cervix near unto that of a virgin. Immediately after completing this operation the surgeon is liable to be disappointed, but if he examines his patient one month after, he is certain to be greatly pleased.

This is the only operation I have performed for this condition, with the exception of mending recent lacerations. It is very desirable to mend the lacerated perineum as well as the cervix, to attain good results.

SOME EXPERIENCES WITH THE HYOSCINE-MORPHINE-CACTIN ANESTHESIA

By W. T. Harrison, M. D.

Perhaps it will be of interest to many for me to summarize my experience in the use of H-M-C tablets for the last five months.

In Surgery

1. One hypodermic has never been quite sufficient for anesthetic purposes.

2. Two hypodermics seldom produced surgical anesthesia.

3. After one hypodermic a very small quantity of chloroform is required, but when needed the administration must be fairly continuous.

4. After two hypodermics a few inhalations of chloroform places the patient in good surgical condition and he can be kept so for a prolonged time by simply using a *few* drops now and again.

5. Only occasionally is there nausea after operating.

6. I have had no case of shock to treat.

7. There has been little or no postoperative pain or distress and no need of catheter in a single case.

8. Occasionally the patient will be talkative for an hour or so after operation, but ordinarily is unconscious of this.

9. Apparently the hyoscine is the disturbing factor in No. 8.

10. With one exception the patients have expressed themselves as pleased with the effects of the hypodermic, one only complained of a horrible sinking sensation.

11. Patients who have been operated upon before under ether or chloroform

say that there is no comparison between the two methods; that after this the operating-table has little sense of terror to them.

12. The nurses are enthusiasts in favor of the hyoscine-morphine-cactin anesthetic, both in the operating-room and in the ward afterward, since it reduces the labor of the first twenty-four hours to a minimum.

13. The first injection may be given in the ward (mine are all private wards, no general) and the second preferably on the table or just before going on to it. Sometimes with a nervous person we let her lie on a stretcher adjacent to the table in the operating-soom.

14. Always the face is suffused; sometimes the eyes become staring for a while, but apparently there is no trouble from the condition.

In Midwifery

The use of H-M-C is a boon to suffering women. The pains are modified; often labor is hastened by general relaxation and the aborting of futile pains, seldom any afterpain needing treatment. And so far I have not noticed a single contraindication.

General

For the allaying of severe pain (traumatic or functional) I have found the combination better than morphine or morphine and atropine. Pain of the ovarian region is much benefited by H-M-C administered either by mouth or hypodermically.

For anodyne effect I observe nearly as quick results are obtained by letting the patient chew the tablet, mixing with the saliva (not using even a mouthful of water) instead of giving subcutaneously. Also, if crushed and dissolved in a dessertspoonful of very hot water the effect is almost as quick as when hypodermically used, which is an advantage for nervous cases, especially in giving the first tablet.

The pain caused by the passage of a gallstone was better relieved by the H-M-C than by morphine alone.

In two cases of very weak heart I gave an extra cactin tablet, gr. 1-67, with the first tablet; results satisfactory.

Keene, Ont.

::: SURGICAL THERAPEUTICS :::

MALIGNANT PUSTULE

As soon as malignant pustule is recognized the affected area should be treated by use of the Paquelin cautery—drawing a deep gutter around the group of vesicles by successively inserting the fine cautery-point deeply into the skin; when the pustule is thus isolated it is opened with a crucial incision. Subsequently it is not necessary to use the cautery. But at a distance of five or ten centimeters from the pustule one should make a second circle by injecting iodine repeatedly under the skin, using the ordinary tincture of iodine. A few drops are to be injected at each place, using altogether a hypodermic syringeful. In severe cases it is necessary to repeat this injection on the following day. If there should be much edema present at the time, free incisions must be made, sufficiently numerous to relieve tension. Compresses of moist sublimate gauze are placed upon the pustule for a dressing. Rarely, when the patient becomes very weak, it is best to give injections of camphorated oil. The results of this mode of treatment are excellent. The edema, which usually is great, either does not appear or quickly subsides; the general condition improves rapidly, and the danger is considerably diminished.

TREATMENT OF ASEPTIC WOUNDS

It is very hard to induce the average doctor not to "meddle" with a clean wound. Unless he has had a practical hospital training and has learned to say "*No*" positively and firmly he cannot resist his curiosity to see how healing is progressing or the demand of the patient that the wound be "dressed."

It is extremely difficult to make the average patient understand (and many a doctor, too) that an aseptic wound should never be exposed until the tenth to twelfth day, when the stitches are to be removed; then, if no infection be found, that it should not again be touched for another ten days.

When drainage is used, unless it be of catgut, the dressings must be changed in about forty-eight hours (the outside cotton and gauze much sooner, and often if there be much seepage); and here lies a great danger. For if the greatest care is not exercised, infection is sure to occur, and an infection at first dressing is just as bad as a dirty operation. Therefore, when an early dressing is imperative to remove a gauze, tube or silkworm-gut drain, it is necessary (a) that the hands be scrubbed and sterilized as for an abdominal section, or, better, sterile rubber gloves be put on; (b) that the gauze be freshly boiled, or just out of a sterilizer without having been handled; (c) that some one besides the doctor remove the outside dressings, down to the gauze, so that the doctors hands or gloves shall not be contaminated; (d) that as small portion of the wound be exposed as possible during removal of the drain, and then the whole wound be quickly covered by the sterile gauze at hand, and (e) that greatest care be taken that nothing touch the surface near the wound. Attempts at "irrigating" or "washing" are especially to be condemned; it is far better to leave a little blood or serum on the wound or skin than to make any great effort to clean them away. If sutures are to be tied and cut after removal of the drain the scissors must be taken directly from the pan in which they have just been boiled. It is well, also, to have a pair of hemostats boiled in the same pan to be used in pulling out the drain, catching any bleeding point.

The patient's hands should be held so that there is no possibility of an involuntary movement contaminating the wound or the doctor's hands; and when possible sterilized towels should be placed over the bed and patient's clothing before the deeper layers of gauze are removed. At the time for removal of stitches there may be one or two little stitch-abscesses; a drop of pus around the stitch from the mild infection of the staphylococcus epidermidis albus, all the rest of the cut being healed. Such being the case all of the other stitches are to be cut and removed before the infected one —otherwise the scissors will carry the infection to the other sutures and multiple abscesses follow. Besides, such a wound should not be washed with peroxide of hydrogen, sublimate solution or other antiseptic, as the fluid will carry the pus to the other stitch holes. The best way is to take a small bit of absorbent cotton on the end of a wooden tooth-pick (or a probe—a detestable instrument by the way) and carefully remove the pus on the surface. If there seems to be a drop or two deeper down, around the suture, the wound may be gently squeezed and the pus wiped away.

A little boric acid sprinkled on the surface and a plain gauze dressing for a few days will be all that is required generally; but it is well to make the second dressing in four or five days instead of ten, as in a perfectly healed wound. Occasionally there will be found more than a little pus around the stitches, three or four being infected and the surrounding skin a little reddened and tender. Here is a mild staphylococcus infection of the wound and it may be serious, even though mild. If it seems to be purely superficial, all that is needed is to remove the stitches, clean the surface as thoroughly as possible and apply bichloride gauze, 1 to 2000. In two or three days the dressings should be removed and if the trouble be no better the treatment appropriate for infected wounds in general must be adopted.

LYMPHOSARCOMA VS. HODGKIN'S DISEASE

It is now claimed by some pathologists that lymphosarcoma affecting the glands of the neck is not the same as Hodgkin's disease, though the two names have heretofore been used interchangeably by most authors. Lymphosarcoma, it is said, can be distinguished from true sarcoma on the one hand and from lympathic leukemia and the

lymphosarcomatosis of Sternberg on the other; while the lesions of Hodgkin's disease are of still different character. There are some cases, however, in which it is difficult to differentiate even by microscopic examination, bearing a like evidences of leukemia and Hodgkin's. But in any case, any rapidly growing tumors of the lower part of the neck should be removed, the region subjected to vigorous x-ray treatment as soon as possible, and large doses of arsenic administered internally.

FORMULA OF DOBELL'S SOLUTION

This excellent antiseptic solution, of especial use in nasal and laryngological work, now should be of uniform strength wherever prepared, the National Formulary specifying that it shall contain:

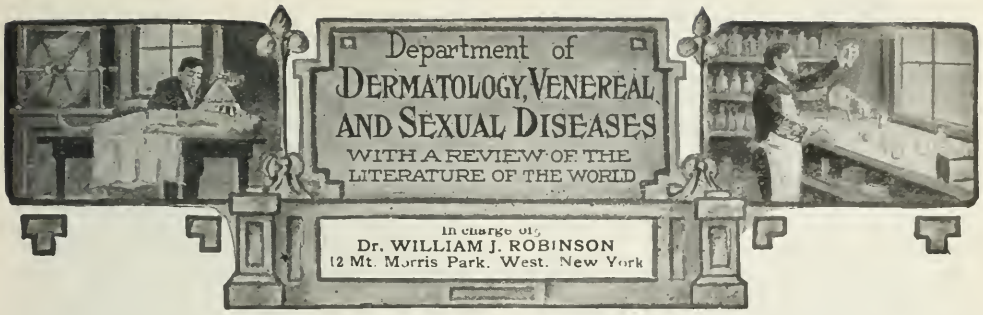
Sodium borate	Gm.	15 (oz. 1-2)
Sodium bicarbonate	Gm.	15 (oz. 1-2)
Phenol	Gm.	3 (grs. 45)
Glycerin	Cc.	35 (oz. 1)
Water, to make	Cc.	1000 (ozs. 32)

POSTOPERATIVE THIRST

While postoperative thirst is not so distressing after hyoscine-morphine anesthesia as under the old ether and chloroform narcosis, it still is a matter of importance, particularly in abdominal surgery, where it is often desirable that twenty-four hours shall elapse before anything is taken into the stomach. It is especially pronounced when there has been great loss of blood, unless the normal amount of serum has been partially restored by hypodermoclysis. To overcome this thirst a liter (one quart) of water may be injected into the rectum or colon, unless some special contraindication exists; preferably just after the patient has been returned to bed. When thirst becomes urgent, moistening the lips and tongue frequently with a cloth dipped in ice-water is a most comforting expedient; but the patient should not be permitted to suck ice, since holding bits of ice in the mouth above all other things increases the tendency to vomit. Later a little juice of lemon may be permitted—it helps to appease thirst remarkably. In ordinary cases a teaspoonful of water every fifteen minutes may be given after the first four or five hours; in abdominal sections after twelve hours unless vomiting occur—if so, twenty-four hours must be allowed to pass before a drink is permitted. When thirst causes great restlessness and nervousness a capsule of five grains of chloretone with a little sip of water seems to give great relief. After twenty-four hours, if vomiting does not occur, cold water may be allowed freely save in the most exceptional cases—as where there is too free drainage from the abdomen.

CHLOLECYSTITIS FOLLOWING TYPHOID

Inflammation of the gall-bladder due to infection by the typhoid bacillus is quite common and may lead to abscess. In most cases of cholecystitis, however, there is mixed infection of the typhoid bacillus and colon bacillus or typhoid bacillus and staphylococcus. The abscess may not develop until many months after the typhoid fever. The Eberth bacilli may be present not only in the contents of gall-bladder but also in its walls—there sometimes being necrotic patches caused by the bacilli and rarely perforative peritonitis occurs from this origin. There can be little doubt that gallstones frequently owe their origin to infection of the gall-bladder by the germs of typhoid. Strange to say, a serious cholecystitis may originate from infection with typhoid and colon bacilli, go on its course without symptoms other than trifling discomfort, and end in perforation before the patient sends for a physician. Rarely a tumor is known to be present (a distended gall-bladder containing bile mixed with mucus and pus), but there will be little complaint until rupture occurs with the profound shock, intense and sudden pain—the latter generally at the inguinal region.



CAUTION BEFORE CUTTING

Some of the unnecessary operations which have been performed in genitourinary work, and the importance of more careful diagnosis

OUR friends the surgeons are likely to make a wry face when they hear it stated that many operations are performed for which no justification can be found; and they get real angry when they are told that some operations are due to criminal carelessness and mutilate the patient unnecessarily, uselessly, wantonly. While we are inclined to believe that the percentage of unjustifiable operations is rather small, still we must admit that they do take place, not, however, from low motives, but merely from wrong diagnosis. It seems to us that as a rule one should be very careful before diagnosing malignant disease and the patient should certainly be given the benefit of a course of treatment of iodides, etc., before being subjected to an operation.

The following few cases are illustrative of our contention. At a recent meeting of the New York Dermatological Society, Dr. Lustgarten presented a man who about a year and a half ago contracted a lesion of the upper lip. The case was diagnosed as malignant disease and an extensive excision of the upper lip was made. Soon after, secondary manifestations appeared which left no doubt of the nature of the lesion. The disease took on a most virulent course, a galloping course of ulcerating gummatous lesions of the skin. There was pronounced glandular swelling and the patient's weight had fallen from 163 to 97 pounds. Under mercurial and iodide treatment, combined with strong diaphoretic measures, the patient improved considerably and his lesions healed. Whether a plastic operation can be done to relieve the patient's unnecessary deformity remains to be seen.

At the discussion which took place at the presentation of this patient, Dr. Taylor said that it was indeed a very sad case, but that it was paralleled by one he recalled of a middle-aged man who had a syphiloma of the penis which assumed large proportions and involved the glans. A diagnosis of carcinoma was made and the organ was amputated. On two occasions he had been consulted by men who had brought to him patients with hard chancres of the penis for which they contemplated removing the organ. Not infrequently these hard chancres are mistaken for epithelioma. He remembered another very sad case of a man whose left index finger had been removed by a surgeon because it was the seat of an enormous fungoid hard chancre. Another patient had had a hard chancre of the left lachrymal caruncle which was cut out and the man was horribly mutilated. Many years ago he published in *The American Journal of Medical Sciences* the case of a man who had specific infiltrations of the lachrymal caruncles so that they protruded like two big strawberries. He went to an infirmary and was operated upon and the resulting dis-

figurement was something awful. Dr. Taylor also recalled a case of syphilitic chancre of the tongue. The patient was slated for operation, but under vigorous treatment got well. As Prof. Taylor says, such cases should teach men to be very careful in making a diagnosis and to hesitate before recommending operation.

Dr. Sherwell said that he had on several occasions the happiness of rescuing men from too hasty proposed surgical procedure. Not long since he had seen two cases where a very serious operation upon the nose was proposed, which in his opinion was not warranted. One case had been diagnosed by apparently competent authority as an epithelioma. The patient was in the care of a very good practician, and acting under his advice a very decided course of antisyphilitic treatment was given, which proved to be entirely successful. The other case is now also well. This latter was an old fellow, a motor-car man, but quite active. He had an ulcer of the leg which, to a certain extent, resembled an epitheliomatous growth, and a respectable surgeon had made arrangements to amputate the leg at the lower third of thigh. Dr. Sherwell said that he advised against doing this until specific treatment had been carried on for a sufficient length of time. The result is that the man has his leg and is earning his living today. He recalled a number of such cases where the patient had been satisfactorily treated without resort to a radical operation, which seemed imminent.

Dr. Fox said that he had seen cases where excision had been performed on chronic syphilitic gummas of the face, but he did not understand why in any case of initial lesion the surgeon could not wait long enough to see if it could not be healed by treatment.

Dr. Mewborn said that he had presented some time ago before the society a man who had had an initial lesion of the lower lip which had been removed as a cancer by a surgeon, who had also removed the satellite submaxillary glands. Later, when the secondary lesions broke out, the surgeon had concluded that he had made a false diagnosis. In another case, at the New York Hospital, the glands in the neck had been removed under the wrong diagnosis of tubercular glands, the initial lesion being on the left tonsil. The patient was a young girl of 16, and later developed an unmistakable secondary rash.

Such cases which are more frequent than is generally known, for people do not shout their mistakes from the housetops, should teach us to be very careful. Nothing can be lost by waiting a while, subjecting the patient in the meantime to a vigorous course of specific, eliminative and tonic treatment.

A CASE OF PYEMIA OF GONOCOCCAL ORIGIN

The ubiquitousness of the gonococcus is illustrated by the following case reported by Dr. F. H. Jacob, honorary physician to the General Hospital, Nottingham. The patient, a woman of 35, had suffered from joint pains and stiffness since Christmas; at Easter the pain, swelling and tenderness of the joints had become much worse, and was associated with profuse sweating.

On April 7 the wrists and ankles were affected, contained fluid, and were very painful and tender. The skin was covered with miliaria, and showed also the remains of an eruption stated to have been chicken-pox. The pulse was 80, and the heart sounds were normal, but there was a pleural friction sound in the left axilla. The temperature was 102°F. There was some not very marked anemia. No leucorrhea.

April 30. Signs of fluid at the right base. A rather densely opalescent fluid was drawn off from a tendon sheath on the right wrist. A film of the pus showed large numbers of *typical gonococci.*

The autopsy showed ulcerative endocarditis of the aortic and mitral cusps.

REMOVAL OF A LUMP OF WAX FROM THE BLADDER

Dr. H. Lohnstein (*Berliner Klin. Woch.* in *N. Y. Med. Jour.*) reports the case of a man, twenty-three years of age, who introduced a quantity of stearin into his urethra to

allay some itching. A portion of the wax remained behind and soon caused painful urination, strangury and bloody urine. After he had remained two months in one hospital he entered another. In both he persistently denied that he had introduced anything into his urethra or bladder. But after a foreign body had been found in his bladder by means of the cystoscope and diagnosticated as a piece of wax, he was charged directly with what he had done and eventually acknowledged it to be the truth. Although the foreign body had remained nearly half a year in the bladder there were no incrustations about it.

The wax was dissolved by means of benzin, half an ounce being injected into the bladder after it had been emptied of urine, and left for 45 minutes. The contents of the bladder were then removed by means of a catheter. This fluid separated into two layers, the urine below and the benzin with the dissolved stearin above. Twenty-five grams of benzin was then injected. This caused strangury in about two minutes, together with a feeling on the part of the patient as though he had been drinking liquor, and the bladder was immediately washed out. The wax obtained from the benzin amounted to 75 grains. No foreign body could be detected on the following day by means of cystoscopy and nothing abnormal except some hyperemia of the mucous membrane.

STERILITY AMONG X-RAY WORKERS

Dr. A. C. Jordan, radiographer of Guy's Hospital, says (*Brit. Med. Jour.*, No. 2427) that while the fact is now well known that exposure to the x-rays produces azoospermia, it is not yet appreciated that the worker who has taken every reasonable care to avoid exposing himself unduly to the action of the rays nevertheless becomes sterile after working daily for a year or so.

By reasonable care the author means having the x-ray-tube enclosed in a protective box, wearing a protective apron, conducting x-ray-treatment with the tube in a protective shield, and keeping at a distance of a few yards from the tube.

The means which he suggests as probably sufficient as a protection against the sterilizing influence of the rays are as follows: The tube box should be made entirely of wood, and should be completely lined on the outside with an efficient protective rubber material, with the exception of an aperture at the top which is controlled by an adjustable diaphragm. A view of the tube may be obtained through a small lead-glass window covered with a flap of the protective material. The operator should always wear a protective apron reaching from the shoulders to below the knees, and, as these two means are not sufficient, he should also have an upright rectangular wooden screen, 3 ft. 3 in. in height and 2 ft. in width, lined on both faces with 3-pound sheet-lead, and should place it close to the couch between himself and the tube-box. A larger screen (4 ft. square) should be supplied for use while x-ray treatment is in progress. The screens may be mounted on casters. Screens such as he describes are not in the operator's way to an uncomfortable extent. For treatment the tube should always be completely enclosed.

The author concludes by saying that considering the entirely undefended position of the testes it is no matter for surprise that they should be affected by very small doses of x-rays, provided they be repeated often enough. Wisdom suggests the advisability of inserting a small protective apron under the clothes as an additional measure. This expedient is in fairly general use, but it is merely an adjuvant, and cannot be relied upon in the absence of the other measures he has described.

PILOCARPINE AS AN AUGMENTOR OF THE BODY-ANTITOXINS

Referring to the paper of Dr. Wm. J. Robinson published in *The Medical Record* of June 15, on the value of pilocarpine in the treatment of syphilis, Dr. M. L. Freundlich agrees that the alkaloid is valuable in the treatment of the disease. In his opinion, however, the rationale of its favorable action is to be sought along different lines.

It is a known fact, Dr. Freundlich says, that after administration of pilocarpine to an animal, in which are found certain antitoxins, the quantity of the latter increases, this being due to the action of the pilocarpine upon the internal secretions. In case of injection of a certain quantity of toxins into an animal, in the blood of which are the specific antagonistic antitoxins, the toxins disappear, being neutralized, in a shorter time, when an injection of pilocarpine follows.

Knowing Ehrlich's sidechain theory, one can easily come to the following conclusions: (1) By injection of pilocarpine the increased quantity of antitoxins and antibodies would antagonize the circulating toxins in blood and lymph. (2) The organs secreting the antibodies would be freed in a shorter time from these antibodies, by which action these organs would be less endangered by the action of the antigens. (3) The same organs would be stimulated, secreting a greater quantity of antibodies.

How mercury and the salts of iodine act in syphilis is still unknown. It is only known that they are the best remedies in the treatment of syphilis. They cannot be called specifics for syphilis, as they do not cure the disease, removing only the symptoms for a shorter or longer time, and do not, like the antitoxins of diphtheria, neutralize entirely the toxins of the disease. There is a possibility that mercury and the salts of iodine are only stimulants to some organs, producing under their influence a greater number of the hypothetical antibodies against syphilis.

In case they fail to do so, for unknown cause—which is rare—pilocarpine will be the best stimulant against syphilis, as the facts adduced by Dr. Robinson show.

SALICIN IN PSORIASIS

Salicin is Professor Crocker's favorite drug in the treatment of psoriasis (*Clinical Journal*, March 6, 1907). He states that this drug is applicable to a wider range and is successful in a larger number of cases than any other remedy. He does not claim that it cures all cases, or that it cures every attack in any one patient, though it does in the majority; neither does he claim that it has any preventive action any more than arsenic has. But he does claim that in a large proportion of cases it is useful and that in a very fair proportion it is extremely successful. In a few it is rapidly successful.

The more acute and widespread the disease, the more salicin and its congeners are likely to be successful. In one case the treatment has been successful in each attack. But where there are chronic, hard patches, this remedy seems to have only a moderate effect. The indurated, thickened patches must have local treatment to remove the crusts. Without anticipating any striking improvement in them, there is a certain amount of benefit observable.

In order to get good results from salicin it is necessary to give it in fairly full doses. Begin with 15 grains three times a day directly after meals, and increase it up to 20 grains, and even up to a higher dosage. Salicin is soluble up to 19 grains to the ounce; therefore, if it is given in greater strength than that it must be suspended in tragacanth or some similar mucilaginous mixture [or may be given in powders or tablets].

The author gives salicin instead of salicylate of sodium because salicin seldom upsets the patient, as sodium salicylate often does. Salicin also can produce a rash of its own—an erythematous eruption of a transitory character; but since the writer has given it so largely—in hundreds of cases—he finds the salicin eruption extremely rare, say not in more than one percent of the cases. If there is such a rash, it is generally morbilliform without itching, which disappears within a short period of the cessation of the drug. Sodium salicylate produces a good deal of depression in full doses, and he chiefly gives it when he has reason to believe there is hepatic indolence and stomach trouble, for which it often is useful; and he gives it more for its effects upon the gastrointestinal canal and liver than for its effects in psoriasis, although as an adjuvant it is often beneficial in both.

As to the local treatment of psoriasis, it is very important. Tar and chrysarobin require great care in use. With regard to

chrysarobin, it is one of the most efficacious of the local remedies in certain cases, but in irritable cases it often spreads the disease instead of curing it. In one instance, in which a very strong preparation of chrysarobin was used on a patch on the back, before the patient was seen by the writer, while it had only little effect on that patch there was a copious crop of small spots developing in the neighborhood for several inches beyond the original patch.

Judgment, therefore, is required in adapting the strength of the drug to the condition of the skin. If there were great inflammation the author would treat it as if it were eczema, with calamine liniment, or glycerin and lead lotion, constantly applied, and that is an excellent way of treating other forms of psoriasis in association with a tar lotion. The liquor picis, which is the old liquor carbonis detergens, should be scrubbed into the skin with a stiff brush, and then the limb should be wrapped up in a glycerin and lead lotion, and the whole covered up with oiled silk. In this way the most obstinate patches are rapidly improved. The large patch on the back of the patient above referred to would get better quicker and more readily with that than by any other treatment, but it necessitated the patient lying down. While it is not a very pleasant treatment, if used over a very large surface, it is extremely efficacious, and a large number of cases yield and improve rapidly.

After the great bulk of inflammation has been reduced by such means the author very often applies chrysarobin pigment. Chrysarobin may be used in almost all chronic patches, in various strengths, according to the hyperemia—10 to 30 grains to the ounce. Stronger applications than that must be used with care, and must not be trusted to the patient himself.

DIFFERENTIAL DIAGNOSIS BETWEEN CHANCRE AND EPITHELIOMA

Chancre of the Lip

1. Occurs at any age.
2. Usually insensitive.
3. Has a regular outline.
4. Is elevated.
5. Grows only a few weeks.
6. Submaxillary glands are involved in the second week.
7. Heals under mercurial treatment.

Epithelioma of the Lip

1. Seldom before middle life.
2. The seat of darting pains.
3. Irregular in outline.
4. Ragged and bleeds easily.
5. Grows for many months.
6. Submaxillary glands are involved only very late.
7. Are not affected under mercurial treatment.

ACUTE CYSTITIS IN AN INFANT

Dr. J. A. Williams (*Brit. Med. Jour.*, No. 2420) reports a very interesting case. He was called to see an infant, aged seven months, one of two twins. He found him with a temperature of 103.6°F. and no definite symptoms except persistent vomiting and swollen gums, with a purple patch about the size of the head of a small nail on the upper one. On making inquiries, the mother told him that he was passing very little urine. The urine was loaded with albumin (only). He diagnosed infantile scurvy with renal symptoms, and the diagnosis was confirmed by the other twin developing infantile scurvy shortly afterward. Under suitable treatment the patient made rapid progress, and on the tenth day of treatment the temperature was normal. He was under the impression he was over his troubles, but on the following day he was called in again, to find the little patient with a temperature of 103.4°F.

For the next fourteen days, in spite of frequent ice-cloths to the head, cold sponging, etc., and with the most devoted attention and care of the mother and nurses, there was no improvement, the temperature oscillating from 104° to 100°F., coming down to normal on two occasions for a very short time. He had, however, in addition to the already mentioned condition, developed gastroenteritis and bronchopneumonia. About twelve days later he began to pass pus and blood with his urine, and seemed to feel great

relief when he had done so. He showed symptoms of intense pain on pressure being made over the bladder.

Dr. Williams now determined to try helmitol, giving one grain every three hours. In twenty-four hours the temperature came down to normal, and remained there. In forty-eight hours the pus had entirely disappeared. He persisted with the helmitol for three days more, during which time the patient passed astonishing quantities of urine. From this time onward he made steady progress, although his eventual recovery was somewhat retarded by an attack of whooping-cough.

DIFFERENTIAL DIAGNOSIS BETWEEN GUMMA AND CANCER OF THE TONGUE

Gumma of the Tongue

1. Is the growth of days or weeks.
2. Is a tumor which ulcerates.
3. Purulent discharge abundant, like soft and decayed cheese.
4. Pressure dislodges only caseous masses.
5. Painless or nearly so.

Cancer of the Tongue

1. Is the growth of months or years.
2. Is an ulceration surrounded by a tumor, destroying it yet extending with it.
3. Discharge sanious and filled with gray or black sloughs.
4. Pressure dislodges sebum plugs not unlike those found in erythematous lupus of the face, from the mucous membrane surrounding.
5. Pain at intervals shooting toward ear —diagnostic.

CHANCRE OF THE CHEEK RESULTING FROM A BITE

In a former issue of The American Journal of Clinical Medicine we reported the case of a girl who became infected with syphilis as the result of a bite. Dr. Jerome Kingsbury, of New York, reports a similar case. The patient, 22 years of age, married, of good general health, became engaged in a street fight with another man and during the scuffle was bitten on the cheek. The wound healed in about a week although the marks from the teeth remained somewhat longer. Nearly six weeks later two small sores appeared on points where apparently the upper and lower teeth of his opponent had been inserted. These rapidly increased in size and a hard tumor-like mass developed. When the man was first seen at the dispensary he presented on his left cheek a somewhat oval-shaped lesion about one and a half inches long and nearly one inch wide. This was situated on a line with, and about one inch in front of, the lobe of the left ear. Two erosions, each about half an inch in diameter, were in the center, one above the other. Surfaces were glazed and of a dull-red color. The entire mass was markedly indurated and the glands beneath the ramus of the left jaw and behind the ear were slightly enlarged.

About one week later the first signs of a roseola could be detected on the abdomen and soon a profuse and very characteristic macular eruption appeared. This was accompanied by a generalized hyperplasia of the superficial lymphatics. There has since been some hyperemia of the throat and the patient has complained of headaches and of malaise.

At present the eruption has faded considerably but well-marked remains of the chancre still persist.

It is not known positively that there were mucous patches in the mouth of the man who is supposed to be the syphilifier, but judging from various reports it is fair to assume that there were. He was a man addicted to alcoholic intemperance and was accustomed to associate with prostitutes of a low class. One woman in particular with whom he spent much of his time had a sore mouth and blotches on her face. Among her intimates it was commonly reported that she had "a bad dose of the pox."

From information volunteered by the victim regarding the vindictive character of his assailant it would seem by no means improbable that the bite had been inflicted with the deliberate intention of transmitting the disease. This appears all the more likely from

the fact that although superior to the patient from a physical and pugilistic standpoint, he had, during the fight, made repeated attempts to use his teeth.

It will be remembered that in the case we reported the bite was also inflicted vindictively with the deliberate intention of conveying the disease.

QUININE IN THE TREATMENT OF LUPUS ERYTHEMATOSUS

At the present time the most successful treatment of lupus erythematosus is by the Hollander method which, as our readers probably know, consists in the administration of large doses of quinine internally and painting the lesions externally with tincture of iodine. At a recent meeting of the New York Dermatological Society Dr. Lustgarten presented a case of extensive lupus erythematosus of the face and of the mouth which, so far as it may be permitted to judge from one case, seems to show that the principal efficient agent in the treatment is the quinine, for, while in the beginning the iodine was used, the patient soon refused to apply the tincture to the face and limited herself only to the quinine. She began with 10 grains of quinine and now takes almost constantly 30 grains of quinine a day, six doses of 5 grains each. Though the patient is a little woman she stands these daily doses of quinine remarkably well. In fact she insists upon the large doses.

When presented to the society the face of the patient was practically cured, though the atrophic tissue showed the original extent of the lesions.

NITRIC ACID IN PSORIASIS

At the New York Academy of Medicine Dr. L. D. Bulkley presented the following case. The patient, a woman twenty-five years of age, was admitted to the New York Skin and Cancer Hospital in April, 1902, and for a long time grew worse, but finally improved while taking mixed treatment internally, and using an ointment containing chrysarobin, pyrogallic acid, and salicylic acid externally, so that she was discharged well in March, 1904. She was admitted again in March, 1905, the disease having recurred four weeks previously on the scalp and the left leg. In spite of the most varied treatment, she grew worse until January, 1906, when she improved rapidly for about three months while taking carbolic acid internally, only to relapse in April, 1906, so that all treatment was suspended. She was then given nitric acid internally, beginning with four drops three times a day, and gradually increasing to ten drops three times a day, local treatment being cut down, and often omitted altogether. The improvement was remarkable. Her condition had been so bad that a beginning pityriasis rubra was suspected, but the inflammation gradually subsided, and by January, 1907, there were only two small areas of disease.

SWEAT CURES IN SYPHILIS

In presenting a case at a meeting of the New York Dermatological Society, Dr. Lustgarten spoke highly of sweat cures in malignant and obstinate cases of syphilis. The treatment in general consists of very hot salt baths, ten pounds of salt to 25 gallons of water, then a quick dry-pack and rubber blankets and an injection of 1-6 to 1-4 of a grain of pilocarpine. The patient is allowed to perspire profusely and then given a dry-rub with alcohol. The amount of sweating that could be produced in an hour in some cases was remarkable. In one case there was a loss of 6 1-4 pounds in one hour. That patient was an unusually strong and healthy man, but three to four pounds' loss in an hour can easily be secured. Of course before giving the treatment one must make sure of the condition of the heart, kidneys, etc.

As to the rationale of the treatment, it is hard to speak positively, but we know that toxins are eliminated by perspiration and it is possible that germs also are. Pilocarpine produces a leucocytosis. It is remarkable that in spite of the profuse sweating the patients do not lose any

weight, but on the contrary, gain. This is to be explained by the fact that the enormous flushing of the system is counterbalanced by increased tissue metabolism. Dr. Lustgarten said that he had known some very tedious cases, a kind which constantly relapses and wears out the patience both of patient and physician, improve remarkably under an energetic sweat cure. A reliable nurse, however, is necessary for the proper administration of this treatment, for the pulse must be watched, etc. If not properly given the treatment might lead to very serious results.

A FIFTEEN-POUND HYDROCELE

Dr. A. E. Horn reports the following case in *The British Medical Journal*: A patient, aged 30, presented himself with the scrotum enormously enlarged and hanging below his knees. At first sight it appeared to be a case of elephantiasis, but on closer examination the swelling proved to consist of a small double inguinal hernia and a left hydrocele. The testicle could not be located, but that of the right side was rather enlarged. The scrotum having been cleansed, the hydrocele was tapped and a quantity of *fifteen pints* of fluid, by actual measure, removed, in addition to about half a pint which was unavoidably lost. The fluid was yellow, of a specific gravity of 1020, cloudy, alkaline in reaction and became almost solid with albumin on boiling. On microscopical examination no spermatozoa were found.

CALCIUM SULPHIDE IN GONORRHEAL RHEUMATISM

Do not forget calcium sulphide and arsenic sulphide in the treatment of that obstinate affection—gonorrheal rheumatism. The profession in general know very little about the true value of these drugs and are thus depriving their patients of a valuable adjuvant in the treatment of a disease which is often declared to be not amenable to treatment. We have had some excellent results by giving calcium sulphide to saturation and arsenic sulphide in divided doses aggregating 1-12 grain a day. Try these drugs in your next case in addition to your favorite local treatment.

RESORCIN IN VENEREAL WARTS

Finely powered resorcin forms a very effective application to condylomata lata (venereal warts). They dry up and shrivel away in a very short time.

FORMALDEHYDE AND POTASSIUM PERMANGANATE

Formaldehyde is an excellent remedy in perspiration of the feet; in fact it is the most powerful drug for perspiration anywhere. Potassium permanganate is also good. But do not try to prescribe the two drugs in the same mixture with the idea of obtaining a stronger combination, as a friend of ours did recently. If formaldehyde is added to permanganate of potassium, a chemical reaction takes place and *both* drugs are destroyed. And the mixture is rendered worthless.

WHITE BLACK-WASH

When calomel is mixed with lime water a chemical reaction takes place, the calomel becoming converted into the black mercurous oxide, Hg_2O. This constitutes the well-known black-wash or lotio nigra, or aqua phagedenica nigra. A physician recently ordered some black-wash and was surprised to find that the bottle contained no black sediment, only the white unchanged calomel. An investigation disclosed the fact that the lime water was *perfectly* worthless, that it did not contain even a particle of calcium hydroxide. When we were told of the circumstances we were not surprised. We have seen many such samples of lime water. When old and frequently exposed, the carbon dioxide of the air combines with the calcium hydroxide in the lime water, converting it into calcium carbonate (chalk) and precipitating. The water thus loses all its lime and becomes worthless.

GLEANINGS *from* FOREIGN FIELDS

TRANSLATED BY E. M. EPSTEIN, M.D.

THE BENEFITS OF SALINE PURGATION

How the saline purgatives act and some of the advantages of the remedies of this class. Their uses and limitations in the treatment of disease

II

FOR expelling the mucus of dyspeptics, for removing the injurious products of secondary fermentations, for facilitating hepatic cellular reaction there is nothing that equals in value the effervescent magnesium sulphate. The remedy acts especially well against those rebellious constipations which are located in the upper intestinal segments, as the ileum and cecum, and resulting in reflex neuralgias, such as precordial pains, false angina pectoris, etc., and which may masquerade as very grave organic conditions. It is because of our disdaining the systematic purgation practised by our predecessors that we see flourishing among us in an unusual way all those complicated affections of the digestive tube and the nutrition which form the foundation of twentieth-century pathology. And yet is the methodic alvine elimination even more necessary at present when a flesh diet is so much more prevalent and in fashion, and when the acid diathesis is so much more widely extant than these were in centuries past.

In infancy intestinal paresis is a powerful cause of various ailments and diseases. It gives us daily in our clinics the exhibition of the strangest, most confusing and motley symptoms. Have we not seen often enough epilepsy as the result of habitual coprostasis? It is certain that infancy is the age which can tolerate constipation the least. Sooner or later that condition results in unforeseen complications, especially in the young offspring of neuroarthritics, whose name is legion at the present day. We may well say that a large part of our infants and young people, without showing incontestable signs of obstinate coprostasis, yet void their intestines incompletely and insufficiently. For this reason the general condition of people bears always the marks more or less of their rare visits to the toilet-room. They complain of anorexia, of epigastric pains with various digestive ailments, of dyspnea, palpitation, vertigo, dislike of work, dull headache, sleepiness, neuralgia, coated tongue, fetid breath, and hypochondriacal obsessions. The stools are few, covered with mucomembranes, which are exfoliations from the colon by the hard masses passing through it. The regular use of effervescent magnesium sulphate removes this morbid condition and prevents the establishment of typhoid and grippal infections.

In the aged the loss of normal peristaltic irritability and the progessive intestinal distension go to complicate arteriosclerosis; visceral toxins (vasoconstrictives) always augment vascular tension. This condition is improved by effervescent magnesium

sulphate, which relieves hepatic insufficiency and reestablishes bile secretion, doing so by overcoming the recurring obstipation (*obstipatio redux*), so commonly the effect of the drastic and resinoid purgatives.

An exact proportional weight of the haloid anhydrous salt composing the effervescent magnesium salt secures evacuations with a certain mathematical exactness, and if long continued, will result in arousing, even in the aged, the defecative reflex in the anorectal medullary center. Then that hypochondria and mental confusion which in the aged are of cholemic and infectious origin will disappear. Then, too, we get an orexigenic and stomachic action which is not to be lightly esteemed, for it augments oxidation and metabolism, and noticeably increases the capacity of the blood-serum for albuminoids, and this again prevents accentuation of azoturia (excess of nitrogen in the urine) and denutrition with the progress of time in the aged. Lastly, effervescent magnesium sulphate contains also incontestibly an antizymotic power. In the presence of organic matter the sulphate inevitably undergoes a reduction which produces H_2S, SO_2, and even H_2SO_3 in the nascent state. It is by this chemical process of decomposition which takes place that a most beneficial gastrointestinal antisepsis is established. It is this that explains best the remarkable eradication of all morbid germs after the administration of alkaline sulphates, a condition advocated by physiologists, Gilbert and Dominici especially.

(Abbreviated and somewhat modified from Dr. E. Monin's article in *La Dosimetrie*, February, 1907.)

CONTRACTION OF AN EXTIRPATED GRAVID UTERUS

Scharpenack exhibited before the Medicinische Gesellschaft of Leipzig, in January, 1906, a pregnant uterus which was removed on account of cancer of the vaginal portion, and which some hours after the operation began to contract. The amniotic sac was already visible to some extent outside the portio vaginalis.

Steiners asked whether this is not to be regarded as rigor mortis? Scharpenack admitted this, but remarked that a number of authors reported peculiar contractions of freshly prepared puerperal and gravid uteri which contractions could not be taken as due to the rigor mortis. Zweifel alluded briefly to such cases in medical literature, where fetuses were expelled from gravid uteri by the rigor mortis. Interesting above all, he thought, was the preparation before them in that it confirmed Schröder's conception that the uterus always contracts over its contents.—*Deut. Med. Wochens.*, April, 1906.

SOLIDIFIED HYDROGEN PEROXIDE

In the ordinary use of hydrogen peroxide the effect is too transient because too sudden, and therefore not thoroughly satisfactory. Drs. C. R. Bohm and H. Leiden have discovered the following mode of solidification: A solution of hydrogen peroxide is moderately warmed and some glycerin added and enough gelatin so that on cooling we get a solid mass, the hardness of which will depend upon the amount of gelatin; this may be reduced to a coarser or finer powder. The mass can also be covered with paraffin.—*New Yorker Apotheker Zeitung.*

VIPER-BITE AND BEE-STINGS

A 4-year-old boy was bitten by a viper (*kreuzotter*) on the external right malleolus. H. Bandisch saw the case an hour after and found the foot much swollen, the face pale and covered with perspiration, pulse weak and rapid. The swelling progressed in spite of deep circular incisions and dressing with a solution of potassium permanganate; on the fourth day it reached Poupart's ligament. The circumference of the limb was twice its natural size and of a deep-blue discoloration. From the incisions trickled a dirty-brown fluid. Three or four times daily there was vomiting of

greenish masses, and there were also heavy perspiration and stupor. The urine diminished and on the second day there was none at all. The discoloration and swelling decreased from the fifth day on, but the recovery was not complete till the eighth week.

The second case was that of a child 22 months of age, which was stung by about two hundred bees. Head, neck, face, arms and legs were covered with violet-blue spots in which the stings stuck. In the evening the temperature was 38.8°C. (101.84°F.), pulse 140; the child vomited three times, then there were alvine evacuations, strong perspiration and scanty urine. The symptoms lasted through the second day and improvement began on the third, but there remained pallor, shining skin, hoarseness, weak voice and difficulty in walking. The child ate a great deal of honey the year before being stung by the bees. The author thinks that the formic acid which the child absorbed with the honey saved its life. *Therapeut. Monatsh.*, 1906, 567.

TO AVOID HARMFUL EFFECTS IN SPINAL ANESTHESIA

Especially for anesthesia with stovaine K. Kroner of the Moabite Hospital worked out the method of letting out the fluid immediately after anesthesia took place. But this had the disadvantage, theoretically, that the induration and strength of the anesthesia would diminish. Three cases soon offered themselves in which this anesthesia had to be practised for quieting pains which defied every other therapy. The following was the procedure: Stovaine Gm. 0.08 (gr. 1 1-8) was injected with the addition of suprarenalin and sodium chloride and the needle left in place with the syringe until in two or five minutes the desired anesthesia took place. Then the canula was freed and some spinal fluid let out, (according to the pressure present, from 5 to 10 Cc.—75 to 150 minims). It proved that the anesthesia did not suffer in its spread, strength or duration; and in one case the anesthesia extended further upward under this method. In one hysterical woman there was vomiting half an hour after the injection, otherwise everything was gratifying. The method therefore is worth trying.—*Ther. d. Gegenwart*, 1906, 313.

CORROSIVE SUBLIMATE AND THE RED CORPUSCLES

Corrosive sublimate destroys the red blood-corpuscles by uniting with the fat-like substances of these corpuscles (lipoids, perhaps lecithin) but not with their albumin. Dotre and Sellei have made some interesting observations on this point. The destruction of the corpuscles is indicated as being done by hemolysis. The membrane of the cells bursts, the contents of it exudes, the hemoglobin is lixiviated and colors the fluid.

But it is possible to protect the blood-corpuscles against this poisonous effect by a serum, and still better by a solution of the erythrocytes which the authors designate as "blood solution." The means for their protection is to be sought for in the fatty substances (lipoids) which are contained in the blood-serum and in the blood solution, and which have an affinity for corrosive sublimate and bind it chemically. The lipoids are found in the red corpuscles in a water-soluble form. If serum or blood solution is treated with ether or chloroform, then the lipoids are extracted and their protective effect against sublimate is lost. The sublimate unites first with the lipoids of the serum or with those of the blood-solution and only after that with the fat-like substances of the erythrocytes. The hemolysis takes place at a temperature of 37°C. (98.6°F.), and as in the case of the toxins, only after the expiration of one hour. In a 0.001- to a 0.005-percent solution of corrosive sublimate the red corpuscles will absorb in two and a half minutes enough of the poison for hemolysis. The binding capacity grows the longer the exposing time is, and the destructive capacity may thus extend to

many more times of the first amount. Blood solution not only protects the blood-corpuscles but also cells which have already absorbed the poison may be detoxicated by the weakly combined poison being taken up by the lipoids of the blood solution.—*Orvosi Hetilap.* quoted by *Pharmaceutische Centralhalle*, 1907, p. 366.

THIOSINAMIN IN EAR DISEASE

Dr. McCullagh, in an article in *The Medical News*, gives the results of his experience with thiosinamin, the following being his conclusions: (1) That it exerts a markedly beneficial action on ear disease accompanied by the formation of new connective tissue; (2) that this beneficial action is due to an increased pliability of this tissue, allowing the usual forms of treatment to accomplish their object better; (3) that its administration should always be accompanied by mechanical measures; (4) that as good results may be obtained by administration by the mouth as hypodermically; (5) that better and more prompt results may be obtained in recent cases; (6) that it exerts a beneficial action on vertigo; (7) that care should be used in looking for contraindications; (8) that better results may be obtained with it in the relief of tinnitus aurium than with any drug used heretofore.—*Practical Medicine*, 1906, p. 304. [Has anyone ever tried this remedy to dissipate cicatricial tissue in the heart? Why not?—Ed.]

SNAKE-BITE CURED BY ANTIVENIN

A native, full-grown, while passing through a bamboo thicket at night outside the town was bitten by a snake on his left leg. He was brought to the hospital within an hour. When taken out of the "doli" and examined, it was found that both of his legs were cold and paralyzed. The power of sensation was quite lost in his left leg. The saliva was dribbling out of his mouth. Though conscious, he felt drowsy and insisted upon being permitted to sleep, while at the same time he complained that his vision was getting fainter. On examining the left leg, about four inches above the ankle joint two scratches were noticed which led to two distinct punctures half an inch apart, the skin all around being bluish. The site bitten was freely incised and scarified and then potassium permanganate was well rubbed in, while at the same time a hypodermic injection of strychnine was given.

This being the proper case to try antivenin serum, an entire bottleful was injected within fifteen minutes after his arrival. In about half an hour drowsiness began to lessen, salivation ceased and sensation and the power of movement was restored in both legs. The patient was not allowed to sleep for the whole night and a cup of strong coffee was given twice in the night, along with diffusible stimulants, that is, ether and ammonia. In the morning he walked away to his house entirely recovered.—Keshavlal F. Dholakia, in *Practical Medicine*, 1906, p. 296.

TREATMENT OF COMMON COLDS

Atkinson writes in *The British Medical Journal*, quoted by *The Therapeutic Gazette*, that in the case of an ordinary head cold the quickest result, in his experience, is obtained by giving 30 drops of aromatic spirit of ammonia in one ounce of water, repeating the dose in two and then every four hours. Three or four doses are generally sufficient to put a stop to the discharge. Should the discharge happen to be thick when first seen, then a snuff of 1 grain of cocaine [danger!—Ed.], 2 grains of menthol, and 100 grains of boric acid quickly effects a rapid cure. When the cold has run down into the trachea, as shown by a tickling of the throat whenever a long breath is taken, then a mixture of 2 drams of liquor of ammonium acetate, and 10 minims of spirit of nitrous ether, in one ounce of water every four hours rapidly gives the required relief.—*Practical Medicine*, 1906, p. 305.

GREATER SIMPLICITY IN THE USE OF DRUGS

The doctor of the old school and of the new. The multiplication of remedies with its temptation to polypharmacy. The return to simplicity and the adoption of the single-remedy idea will contribute to our strength

THE doctor of the old school may have used more medicine but certainly not so many kinds or in such varied combinations as the twentieth-century physician. His remedies, ofttimes gathered by his own hands in the fields or by the wayside, may have been more obnoxious than the products of present-day pharmaceutical elegance; but he was obliged to treat a great many diseases with these few remedies and consequently learned very thoroughly the individual action of each.

Let us look into one of the musty old saddle-bags, perchance treasured by some sentimental descendant of the oldtime disciple of Aesculapius. There is opium, ipecac, squills, senna and salts, nux vomica, belladonna, foxglove, soda, rhubarb, bromides, asafetida, and surely calomel. Place that list alongside the great price-list of some modern pharmaceutical house, and we wonder how ever did the oldtimer get along!

A little reflection, however, will convince us that with all of our pharmaceutical gains we have been to some extent robbed, unconsciously robbed, of considerable practical knowledge of individual drug-action possessed by the old doctors and which was of inestimable value at the bedside. The manufacturing chemist is usurping the place of the dispensing pharmacist and is making therapeutics altogether too easy for our own and our patient's good.

The writer well remembers the rhubarb compound of his old preceptor, who, as he was about to prepare it, would invariably call for "some soda, a little hot water, a bowl and a spoon." It did not contain all the ingredients of some of the beautiful chocolate-coated tablets listed as "rhubarb comp.," but who can deny that it, also, accomplished much good. Said Dr. Bruce Loomis in an article on "Rational Therapeutics" in *The Philadelphia Medical Journal* of April 19, 1902, "The history of the art of therapeutics is eloquent with warnings against too much medicine and too many medicines."

Never before was it so important to heed this warning as now. We have been duped by the proprietary-medicine manufacturers into paying large prices for "concentrated foods" that are really worth no more than milk and whisky, and in many instances into prescribing their cure-all remedies, the formulas for which we do not know. The manufacturing chemist is paying to his men large salaries (or rather we doctors who buy the goods are paying them) to display before us several times a year his many-colored products with ever-increasing complexity of formulas. It is so easy to prescribe So-and-So's pills and tablets and elixirs, that ere we are aware, we fall into the habit of giving to our patients a tablet for this symptom and a pill for that and the other, at last to discover

to our surprise and chagrin that some of our unfortunates are taking at one time some twelve to twenty different drugs.

Is it not reasonable to assume that among so many ingredients there must be more or less antagonism of drug-action and also new and unpleasant if not damaging conditions produced? Instead of trying to combat all the symptoms, would it not be wise to seek out the chief cause and give one or two remedies whose action can be carefully watched?

It is time we aroused ourselves from our therapeutic laziness and begin to do our own thinking in prescribing instead of allowing manufacturing chemists to do it for us—to learn the real art of rational therapeutics, "the exhibition of a few remedies well selected."

I do not care in this brief article to advocate any of the socalled "great movements" in practical therapeutics, but I do believe that we should welcome any effort toward a more direct and simple method of administering drugs in the treatment of disease, a method that will enable us to watch individual drug-action.

MILTON E. GREGG.

Elbridge, N. Y.

—:o:—

This is a thoughtful article and Dr. Gregg's suggestions are along the right line, according with the principles which we have so often advocated through the columns of this journal. To get definite results we must turn to the single remedy and use it with a definite end in view. We must first know the remedy, know what it will do, know when to use it and when to stop its use. The indiscriminate combination of remedies is one of the great defects in therapeutics, and, mind you, this is just as glaring an error when the medicine is one of the polypharmaceutical products of the U. S. Pharmacopeia and National Formulary, as when it is a "modern" proprietary; and it is just as wrong to write a prescription for or dispense a mixture containing several ingredients when there is the indication for but one.

As to the indications for the use of our remedies we are not so sure that we agree with the doctor. It is seldom that our therapy can be fundamentally causal—directed to the removal of the cause. There are some conditions where we can so employ our remedy; but in the majority of cases we must aim to reach the factors that contribute to the intensity of the disease process, or to fortify the system to repell it. The "symptoms" are the guide to our therapy, though of course not the things which are to be treated. We must get out of the notion of considering diseases as entities to be fought, driven out of the body. Successful therapeutics is based upon the study of morbid conditions and aberrations of function; and we must aim at their removal by the administration of exactly indicated remedies. Such a study instead of leading to the multiplication of remedies will lead to a reduction of their number.

The modern bugaboo is the proprietary manufacturer. Don't be frightened! There are good proprietaries and bad ones—of course. The doctor should simply be discriminating, welcoming and holding fast to all that is good, while rejecting what is found evil. The really wise physician will not be too ready to show the detail man the door. In many a case he brings substantial help and real additions to our too scanty stock of therapeutic wisdom. That physician is fortunate indeed who cannot learn something from the detail man.—ED.

THE CROSS-ROADS DOCTOR: BY ONE OF THEM

Enclosed find one dollar and fifty cents for the renewal of my subscription to THE AMERICAN JOURNAL OF CLINICAL MEDICINE. Of course I want it. I get more helpful hints from its pages than any other journal I receive.

Now, just a few words about the poor cross-roads doctor, who has been held up to ridicule now and then by the upper so-called "four hundred."

A great deal has been said about the cross-roads doctor, but half has not yet

been told, for he is really the mainstay in the medical profession. It is possible for new "fads" successfully to run the gauntlet of a few "authorities," but it is simply impossible to either bribe, hoodwink or do anything else to the great mass of active, thinking and independent physicians who are making daily observations in the great postgraduate school of actual every-day practice.

To be a successful physician anywhere (but especially the cross-roads doctor) one needs to have a good, sound body, and with it almost invariably follows that there is a sound and clear mind and an unlimited amount of courage. In the second place, he needs to have good, common sense and a practical education, and the more practical the better. *En passant* let me say I just read in one of our dailies that out of thirty-six college-bred men who took the examination for civil service but nineteen passed, and the questions were such that pupils from the seventh and eighth grades ought to have been able to answer them, showing how extremely theoretical and narrow our liberal education is.

The foregoing is quoted to support the contention that along the whole line we are drifting toward theorizing instead of being practical. What we need is practical therapeutics, and we do get it in the hard school of country practice where one is liable to meet with all kinds of accident cases and all sorts of diseases, as one does in larger cities, with the exception that in most instances we lack hospital facilities, and a bodyguard of trained nurses at our command to hand everything necessary without having to ask whether it has been properly sterilized.

It is not so when you are called ten or fifteen miles out into the country to a case of compound fracture, amputation, or a good stiff labor-case, where everything seems to go wrong and where the physician needs to be cool because everybody else is excited and in your way. It is *imperative* to be resourceful, for you have at the best little or nothing in the way of modern conveniences and you must act quickly and know what you are doing, because it may be that the patient is fast slipping away from you.

It can readily be understood that this is no easy task and if necessity was ever mother to invention, she certainly finds a fruitful field here, when one has to be his own assistant, anesthetiser, nurse, as well as surgeon-in-chief. Now, if we add to this the fact that our results are almost uniformly good, so much greater the credit due. Personally, I have yet my first case of sepsis to see where I have had charge from start to finish. I ask, who is entitled to more glory, the cross-roads doctor or the physician with silk hat and wearing broadcloth?

If it were not as Admiral Schley said, "There is glory enough for us all," I certainly should take off my hat to my fellow cross-roads doctors as being the real heroes. Do not suppose for a minute that the poor cross-roads doctor knows nothing about asepsis and antisepsis in surgery and elsewhere, or of the modern theory of bacterial origin of the many ailments human flesh is heir to, or does not possess quite a comprehensive knowledge of histology, pathology, and bacteriology and the other "ologies" that are taught at a first-class medical school. And why shouldn't we know of all these? I have not yet heard of a separate school where cross-roads doctors are turned out, nor one where the city-brand is exclusively manufactured; the courses and requirements are supposed to be the same for all and at examination the country often carries off the honors. With the same education and training (because most of us have a year's hospital training), and with the generally conceded fact that from the country come the greatest intellects, I cannot see why *we* should be intellectually so inferior as not to be able to absorb as much in and out of school as our city brethren. I admit that there are a few fogies and back numbers here and there, some quacks who are a disgrace to our noblest of noble professions, but where we have one, the cities can boast of them by the scores.

This, in brief, is my opinion, and I think I can substantiate everything I have said by actual experience and, therefore, ought to know whereof I speak.

A. C. P.

——, Minnesota.

CAN WE ABORT TYPHOID?

I like the "clean-cut, clean-up and keep-clean" doctrine of CLINICAL MEDICINE. It is reasonable and intelligible, and when applied in suitable cases effects a cure in the curable, or at least contributes to that end. But as to the claim made by some physicians that typhoid fever can be aborted or cut short by any known drug or treatment, I must dissent. I hold that there is no known remedy to abort, abridge or cure it. I have had much experience with typhoid and have just treated six cases. These cases have been carefully treated with intestinal antiseptics but I have not succeeded in cutting short any of them—a thing I conclude cannot be done, though I believe that to clean out, clean up and keep as clean as we can with intestinal antiseptics is a very rational form of treatment, in so far as it controls the production of toxic material and the growth of non-specific bacteria; but no antiseptic can be used in sufficient strength to kill the specific bacteria within the body.

The intestinal antiseptics will relieve the patient of many of the symptoms due to toxic material, in the bowel; but on goes the disease to live its set time out. Aconitine will lower the fever and blood-pressure, and here it stops; and cool water will do this equally well and more safely; and neither of these aborts or cures. It is true that hydrotherapy and intestinal antiseptics will greatly lower the mortality of typhoid, but never have I seen, nor never do I expect to see, with our present means, a case of typhoid fever aborted or even cut short. The more I observe its behavior with or without drugs the plainer grows the fact that it is self-limited.

The best I can do at present is to clean out, keep as clean as possible with intestinal antiseptics, use hydrotherapy, employ a good nurse, give good food and meet the indications as needed with such drugs as will control the complicating symptoms. Strychnine I give time and again when the least heart flickering occurs.

I. N. M.

——, Tennessee.

—:o:—

Typhoid can be and is aborted, cut short, cured, not occasionally but frequently. In fact we should feel culpable were a case of true typhoid to run the classical course under our treatment, providing of course that we saw the case sufficiently early.

During the early stages of the disease the administration of intestinal antiseptics will render innocuous any of the typhoid germs which may be present in the bowel and multiplying there, if care is taken to keep the bowel carefully cleaned out and in as healthy a condition as possible. Even after the bacteria have burrowed into the lymphoid tissue and before ulceration has commenced (the second week) the administration of remedies of this class will put a stop to the putrefactive and fermentative process within the bowel, which play a far more important part in typhoid fever than most physicians imagine.

Did you ever stop to think why it is that a thorough purge reduces the temperature, cleans up the tongue, and improves the general feeling and condition of the patient? It is simply because this factor, and an important one too, has been removed. If we get rid of this complicating feature in such diseases, the recuperative and immunizing forces of the body have a greater opportunity to assert themselves. We have demonstrated to our satisfaction repeatedly that with half a chance nature herself can repel the invasion of disease, even to the extent of aborting it.

When ulceration has commenced, then of course the intestinal antiseptics are doubly indicated, simply because as the lymphoid tissue breaks down millions and millions of the typhoid bacteria are thrown into the bowel, there to be mixed with the

fecal matter and to multiply *ad lib.*, unless the physician administers the remedy which can put a quietus upon them, thereby preventing reinfection, while at the same time eliminating the factor of fecal poisoning, the importance of which we have just endeavored to emphasize.

Nuclein stimulates the normal resistant forces of the body to do full service and the blood and body-fluids generally become inimical to the invading germ. Now, if you support vitality during the fight and provide concentrated, easily assimilated nutritious food, toning up in the meantime with strychnine and cactin, you enable the patient to oppose new red blood to the disease; phagocytic action is marked, reparative processes are instituted more rapidly than destruction occurs and recovery results. It is often wise to help by giving alkaline antiseptic enemata, sometimes to flush the bladder also, or to administer formin internally as a urinary antiseptic, but by the sensible use of non-injurious but positive bactericides, nuclein and vitoincitants you can cure typhoid easily and surely.

Of course the skin must be kept active and the kidneys relieved of undue strain. You will find that thin barley water (containing one ounce of the liquor antisepticus alkalinus of the National Formulary to the pint) flavored with lemon juice and sweetened with saccharin, will prove a good drink. The mouth and nares must be frequently washed with a warm antiseptic solution, and fresh beef-juice or prepared beef-foods given every two hours. The cases that are properly handled do not require antipyretics at all. Those which have been allowed to run and carry a high temperature may call for a few doses of aconitine or veratrine, but as soon as morbid material is removed and natural processes are restored hyperpyrexia will disappear.

This is not theory, Doctor, but clean, demonstrable fact. We have treated many cases of typhoid, we know it when see it, and the laboratory proves our diagnoses correct. In the old days we lost some cases and all of them "ran their course," the patients who did recover getting up slowly—too often wrecks. Now we don't lose them. The most serious cases are up and out before under the old treatment the critical period would have arrived. Is it possible that we and hundreds of other doctors who use the antiseptics are deluded and see no typhoid? What about the typhoid cases we are asked to see in other men's practice? Another delusion? The man who has seen, "treats his next typhoid case alkaloidally." The patient gets well before the disease is really marked; so does the next, and the next. Is he deluded or has he ceased to get any typhoid cases? Go ahead, Doctor, and see this thing out.—Ed.

VERBENIN: A USEFUL REMEDY

Verbenin is a concentration of verbena hastata, commonly called blue vervain. The great value of this remedy is not as generally well known as it should be. It has generally been used as a nervine in epilepsy, etc., and many physicians do not know that it has any other uses.

Verbenin has proved to be of some value n epilepsy and in combination with other nervines it would no doubt give still better results. It could be combined with such agents as scutellarin, cypripedin, avenin and dioscorein. Verbenin deserves a trial in menstrual epilepsy, especially in combination with mistletoe, as both agents are strongly nervine and emmenagog. In painful menstruation verbenin and dioscorein given together give good results.

In real large doses verbenin is emetic and in small doses expectorant. It has proved to be of value in many bronchial and lung troubles. In such conditions it can be combined with asclepidin and lobelin. Verbenin is tonic and in combination with myricin and capsicin makes a good general tonic for nearly all atonic conditions, especially where the liver is sluggish and the nerves need bracing. It is a good combination as a "hot-weather" bracer and will often be of value for children convalescent from acute diseases in summer months.

Verbenin is an antiperiodic, and has been used with success in both acute and chronic malaria. In acute malaria it should be used with quinine hydroferrocyanide or cornin and in chronic malaria with berberine and euonymin. In chronic, torpid conditions of the hepatic organs and smaller intestines verbenin is equal to cascara. It harmonizes well with chionanthin in chronic hepatic troubles. When given in hot water verbenin acts as a diaphoretic and with asclepidin given in hot water makes a good relaxing diaphoretic febrifuge for simple fevers.

In nervous trouble lobelin will assist verbenin in relaxing nerve-tension and bring about the desired results. As myricin is a nervine of great value it would no doubt add much to the value of verbenin in many nervous troubles. Verbenin is emetic, expectorant, nervine, antiperiodic, diaphoretic, cholagog, emmenagog, tonic, diuretic, laxative, and antirheumatic. Dose one or two grains every four to six hours.

JOHN ALBERT BURNETT.

Auburn, Ark.

SOME USES FOR THUJA

I notice occasionally articles on thuja (Lloyd's specific tincture). I have used this very valuable remedy in the treatment of hemorrhoids, goiter, large soft moles, etc., for the last fifteen years, but never with the remedy simply injected promiscuously or rubbed on. I always inject 50-percent tincture of thuja in sterilized water with the hypodermic syringe, directly into the abnormal growth I desire to destroy, injecting slowly until the tumor is fully distended with the remedy. One treatment for each tumor is usually sufficient to cure piles.

For anal fissures I first cleanse the parts thoroughly with a strong carbolized wash each morning. Then I dampen the diseased tissues with the same remedy (equal parts of tincture of thuja and water). I remember being called in consultation to Utica, Mo., by Dr. T. R. Dice to see an old man suffering with piles. On making an examination of his rectum I found not less than six very large hemorrhoidal tumors. They had come down, as the old man said, "two or three days ago," and he was unable to replace them; neither could he get the bowels to move. I at once injected every pile-tumor in sight with Lloyd's specific tincture of thuja, full strength, and gave him a strong laxative to move his bowels, composed of

Spec. tinct. cannabis indica.....dr. 1
Spec. tinct. podophyllum.....drs. 4
Potent cascara (Lloyd), q. s. ad..ozs. 4

A teaspoonful was given every four hours until free evacuations resulted. Then I continued this remedy (the evacuant) with an addition of spec. tinct. nux vom., dr. 1; glycerin, ozs. 4; one-half to one teaspoonful after meals. In two weeks the old man was well—hemorrhoidal tumors disappeared. I cure all my cases this way and don't fail. And I treat goiter the same way with other indicated remedies.

J. E. CALLAWAY.

Chillicothe, Mo.

—:o:—

What is the effect of this injection, Doctor? Is it painful? Does the pile blanch or slough? Please tell us.—ED.

THE TREATMENT OF EARACHE

Dr. George L. Richards of Fall River, Mass., has called our attention to a method of treating earache which has been advocated by him for several years. Instead of using "ear drops" or medicated oils Dr. Richards now employs a gelato-glycerin bougie.

The bougie when prepared is either kept in a neutral powder like lycopodium or wrapped in tinfoil. To use, the lycopodium powder is washed off in warm water, or, if wrapped in tinfoil, they are dipped in warm water. The bougie is then very slippery, and the affected ear being placed uppermost it can easily be slipped down into the external canal without the slightest discomfort to any child. Here the bougie soon dissolves, the anodyne is brought

directly into contact with the inflamed surfaces and the pain is relieved.

Dr. Richards has recently somewhat modified his formula, which now is as follows:

Acidi carbolici	gr. 1-6
Ext. opii, fld	gr. 1-4
Cocaini	gr. 1-14
Atropini sulphatis	gr. 1-30
Aquæ	q. s.
Gelatini	q. s.

These bougies can be made by any druggist or can now be purchased already prepared from manufacturing chemists.

THE TRUTH ABOUT TEXAS

No man can tell the truth in regard to Texas and its possibilities, for the reason that Texas is simply an infant giant that some day will be felt in every great national movement, every great political event. When a man says he thinks "there are fine opportunities in this state" his horizon of observation is very limited. Today no state in the Union is springing into prominence, wealth and population as is Texas.

Sixty years ago Texas was given over to the buffalo, the gray wolf and the coyote; today the total assessed valuation in the state is one billion, six hundred millions of dollars. Surely Texas do move. Once the staked plains were supposed to be only fit for cow pastures. Today men are raising a bale of cotton to the acre, now worth from $60 to $80, and watermelons weighing from 75 to 100 pounds. Fifteen years ago land could be had for $1.00 an acre that will cost to purchase now, from $20 to $40 per acre. There are farms here that yield from 40,000 to 50,000 bushels of wheat in fair years. I saw a farm from which 800 bales of cotton were taken in one year and the yield was a bale to the acre.

No other state has the diversity of soil and climate that Texas has. From the Gulf to the western boundary the distance, as the crow flies, is over 700 miles; while between the extreme points of her northern and southern boundaries it is over 600 miles. The staked plains are 2500 feet above the level of the sea and El Paso is very much higher. Some of the finest apples and grapes grown on this continent are raised in the Pecos valley, and at Brownsville oranges and lemons are grown that will compare favorably with that wonderful spot, Riverside, California. Comparing Illinois and Ohio with Texas: those two states can raise wheat and corn and oats; they can raise grapes and apples and peaches in some sections, the latter being an uncertain crop. I have lived in both the above states, so know them well. Wheat, oats and corn are the money crops of these states; cattle and hogs are an annual cash crop, but the farmers must put up his cattle for six months in the year, must feed them, and as a consequence it costs him double the expense to put a steer or a hog on the market as it does the Texas farmer, whose cattle and hogs range in the open all winter.

Farmers and doctors often fail because they do not understand how to cultivate and what to cultivate. Texas has no abiding place for penny-brain doctors or farmers, but for men of sense, thrift and push we have room for 20,000,000, all of whom can get a good living.

Our iron-ore beds are immeasurable. Our pine forests go up into the hundreds of millions of feet, and our diversity of soil and climate enables us to say that no soil in America can approach Texas in truck or fruit farming. Only a few weeks ago, near Brownsville, a man cleared $750 on one acre of celery and he states that the acre cost him about $300 to put in, cultivate and harvest. At the town of Divine a German told me he cleared over and above all expenses $600 per acre on seven acres of white onions; and I saw a field of cabbage in March, three years ago, that was planted in November and did not get more than usual care that would yield, on a conservative estimate, $400 per acre.

We have millions and millions of acres of open prairie and partially timbered land just the same as the lands where the celery, onions and cabbage grow, waiting to be tickled with plow, harrow and hoe to give just such results, and our field for selling

these goods is the cold bleak north where for six months in the arms of Boreas the ground is frozen to glittering shingles, beautiful in death; meanwhile the thrifty Texan is delivering his harvest of field and garden.

We have no room for ne'er-do-well rovers. We want clean, honest men and women with plenty of brawn and gray matter. Such men can come here and get land on ridiculously easy terms, and if the pluck is in them, in a few years they can go out and buy more land. Normally there is scarcely any winter here. Last winter roses bloomed in Dallas in our gardens every winter month, and when you go to the Gulf and Rio Grande section you are in the artesian belt, where the temperature seldom touches fifty degrees and only a few days in summer ranges above 90°. There a man can irrigate his lands from a vast body of water that he can reach at a depth of from 300 to 400 feet and in most instances the water flows out in quantities sufficient for storage, so that it can be turned on when needed.

Our soils vary: In north and central Texas the lands are mostly black waxy lands. You can find here farm after farm of this land where wheat has been grown for the last twenty years on the same wheat ranges, and each year the yield is from fifteen to thirty bushels to the acre—and without manure. Cotton similar. I have seen corn planted on bottom land without plowing, within two miles of the city of Denton, and it made a paying crop. Fifty percent of the cotton crop raised on the black lands is planted on a ridge made by plowing a furrow and turning another so that the loose soil meets, while the center of the ridge is not touched. Of course this is rotten farming, but this same rotten slip-shod class get from $30 to $60 per acre from these methods.

Where twenty years ago land was considered grazing land, and so set down by our state surveyors, these same lands are now gold mines to the industrious farmers, for be it remembered there is a steady increase of rain-fall all over the state, and the discovery of artesian water is producing conditions in Texas similar to Riverside in California.

Let me here say I am not using the best medical journal published on this continent to advertise Texas. I have no land in Texas to sell. I sold the last I had last year for $9.00 per acre, and it cost me $2.80 in 1904. It was in a state of nature when I purchased it and I never touched it. Not a Sunday newspaper is issued in Dallas where opportunities are not offered doctors who are willing to build up a practice and who will rough it, if necessary, to make good money. We have mushroom towns but they come to stay for the reason that Nature's lavish hand in soil and climate is ever manifest.

S. E. McCULLY.

Dallas, Tex.

HOW OUR CRITIC LOOKS AT US

Dear Doctor Abbott:

I have just finished reading your "*Helpful Hints*" to doctors and will tell you the impression it made.

1. Abbott is a great financier.
2. Abbott is not a *bad man*.
3. He has told his piece until he knows it.
4. He almost believes in it.
5. He has made others believe it.
6. It is as reasonable as other theories.
7. It (outside of the anesthetic) is comparatively safe.
8. The anesthetic will evidently kill someone in the near future.
9. Alkaloids as such can not be absorbed.
10. Fluids alone go into the circulation.
11. Fluids are preferable medicaments.
12. Lloyd's specific tinctures are superior to alkaloids because they are already in solution and ready for assimilation.
13. Some alkaloids are hard to dissolve.
14. Let every man do as he likes about prescribing or dispensing.
15. I prefer prescribing.
16. It requires a sharp eye to tell one granule from another if they are not *labeled or colored*.
17. I can tell Lloyd's specific tinctures by taste, smell and general appearance. I can do the same with the powders I give.
18. If a tablet-man got his labels off his bottle he would be at sea.

19. There is no certainty to any man who is not familiar with his tools.

20. So many sick people get well without medication.

21. So many get well in spite of medication.

22. Statistics are deceptive.

23. Every doctor is a law unto himself.

24. I am practising to suit myself!

W. P. Howle.

Charleston, Mo.

—:o:—

1 Sure—he knows that the foundation of financiering is honesty and fair dealing; the square deal and promises kept.

2. Ask those most closely associated with him, and his employes.

3. You bet, he has said it many times and will say it many more.

4. He altogether believes it, and did before he first said it; and so would you if you knew. Climb up to the peak, Brother, and look around.

5. Many, and only those who will open their eyes, see; but there be those, we are told by Holy Writ, who having eyes see not, and ears and hear not. Are you among these?

6. More so—it is God's truth; and even those who oppose it now say that it must come "in time." We say it is here now, and to stay—that's the only difference.

7. It is not comparatively, but absolutely safe; the safest and the only safe method ever devised. For we can not admit that infinitesimals are "safe," when the patient may die for want of effective doses.

8. So say we. That this powerful agent is absolutely devoid of peril in every possible case is absurd. We have many times warned the profession to be *cautious* and use judgment in its administration; and why there have been no deaths yet we are unable to conjecture. Since much more than two millions of these tablets have been placed in the hands of the profession, is it possible that there can have been absolutely no deaths? If so, where are they? If you have met them from this cause, *if you are sure you have*, why not report them, that we may ascertain the limitations and the cautions to give out to your brethren? Thus far only one even alleged death from this anesthetic has been reported, that by Van Meter, of Kentucky, in the *J. A. M. A.*, and it's doubtful what caused that death—whether the anesthetic (carelessly and ignorantly administered to a practically moribund patient, as we believe) or the complications resulting from a serious operation upon a desperate case.

9, 10, 11. Poppycock. Anybody can dissolve the alkaloidal granules within one minute and administer them in watery solution, vastly preferable to alcohol, for obvious reasons. This is silly, inane, childish.

12. Ditto, ditto; Lloyd does not need such a ridiculous boost. Especially when his specific tinctures deserve—and get from us—so many encomiums for their real merits.

13. Use the more soluble salts—they are available.

14. Amen.

15. Except for emergencies, so do we when we *feel sure* we can get what we order.

16, 17. Can you not tell a granule by taste as well as a tincture?

18. A fair objection. I arrange my bottles alphabetically and can tell by their position in my case.

19. That is a powerful, an unanswerable argument in favor of dispensing.

20. So they do; but most of them get well quicker, surer and better by having the aid of a doctor who knows how to practise medicine.

21. This does not apply to the active-principle methods as the remedies are applied with distinct object and accuracy. It does apply to the old blind way and the uncertain remedies.

22. Not when correctly made and deductions drawn legitimately.

23. He should be, but too many let others do their thinking. He must be if he would practise with active principles.

24. Would that we could induce all the rest to do so.

Dr. Howle is a fair man and has said his say well. He falls down only as to things he does not know but thinks he does. Nobody more earnestly objects than we to having leadership thrust on us. We only

want to be privates in the ranks, and if anybody will only take command we will do our utmost to uphold him. Who speaks first?—Ed.

REFLEX CAUSES OF NERVOUS TROUBLES IN CHILDREN

The last issue of Clinical Medicine is clearly up to its former standard of excellence and interest. I anticipate the issue of every number with as much pleasure as I would a meeting, from which I expected to receive all the benefits that accrue from a heart-to-heart talk around the camp-fire, by those who are resting from strenuous service on the firing line. I feel that this journal differs from many other publications in just this respect: the articles are down where we can reach them, and record the actual office or bedside experiences of those who are really doing the most of the work in this grand calling of ours. I am certainly glad to be a member of this vast Clinic "family," and hope that some day we may all meet in sweet communion in a grand national gathering.

In this last issue I note that C. M. F., from Indiana, is somewhat troubled over a case that he reports, under the caption of "Post-Grippal Neuralgia." I have read the account with interest, and have noted the comments of our esteemed editor, as he places the matter before the house for discussion. I do not find any mention of a line of diagnostic observation that those of us who have had some experience in the treatment of children have been led to observe very carefully, and that too, after one or two cases have been taken from us—much to our chagrin—as easy as "taking candy from the baby," by some other doctor who knows a thing or two about children.

I may not be correct in my surmises, but in a very large majority of these cases, either in boys or girls, the condition is of a reflex nature caused by a malformation or incarceration of the prepuce or clitoris. I see you smile! But seriously, Doctor, if you will take the trouble to observe it, you will find a vast number of abnormal conditions in this line, where you least expect them. The Jews have the right idea, I think, in this matter, when they circumcise their male babies. I believe that every male child should be circumcised when he is a week old, and the girls should be under the observation of the family doctor, who should detect any of these anatomical defects before it is too late to remedy it easily. Very slight adhesions in either sex cause reflex conditions that are at first only a disturbance in the hypogastric plexus, but from the intimate anatomical connection of this plexus to those above, it requires but a comparatively short time to convey it by continuity to the spinal area, thus affecting the whole sympathetic system.

In just what form or manner this reflex condition may manifest itself, one can never predict. It may be in some of the many forms of hysteria, epilepsy, chorea, or keep us guessing on the manifold exhibitions of tic, a condition that we shall know more about some day, I hope. Too many physicians are inclined to class these peculiar actions of the child under the general head of "nervousness," and make no special effort to find out the specific cause of the trouble, which may easily be found, in many cases, if one only looks in the right place for it.

Personally I do not think it good practice to mince matters of this nature at all. If I find these manifestations in a boy who is brought to me as a patient, I examine the genitals at once, and if I find a long or adherent prepuce or very small meatus, I advise an operation at once. If it is a girl who is the patient, if I can get a history of a fall or vigorous rope jumping and menstruation is backward or she is underdeveloped, I do not hesitate to advise the use of a No. 1 pessary, put just where it belongs and left there until the trouble is corrected. I am aware that there are no precedents in literature that will back me up in this method, but I do it just the same, and have had the satisfaction of bringing several girls back to useful womanhood, who were in a fair way to become chronic "epileptics" through the mistaken ideas of a fussy mother and timid doctor,

who had consigned them to a bromide life. The end usually justifies the means, and it certainly has in this class of cases for me.

In many cases these reflexes are the means of establishing a form of onanism that at first is only imperfect, but it eventually comes to such a state that it soon plays havoc with the entire nervous system of the child. Not quite so profound in its consequences, but nevertheless very important in these reflex cases in children, are the throat conditions. Too much attention cannot be paid to enlarged tonsils and adenoids.

These conditions appear fairly early and should be taken in hand by the family doctor, who should have the interest of his patients sufficiently well at heart to advise the parents regarding the condition, whether he is asked to do so or not. The extremely potent effect of these conditions on the growth and general development of a child is too well known to the average doctor to need farther mention here.

I have digressed somewhat from the subject, which was a specific case, but the subject is so broad in its scope that I could not resist the temptation to open up its discussion among the family on some features of it that might prove of interest, before it is tabled finally.

I think that if our brother had looked carefully in either of these areas, in his case, that he might have found the cause for at least a large part of his trouble.

CHARLES E. BUCK.

Boston, Mass.

—:o:—

That derangements in the genital sphere, as well as in other sensitive areas of the body, may cause all kinds of nervous troubles in children is unquestioned. The amazing part of the "story" is the extent of these disturbances and the number of times that the physician fails to locate the cause. Dr. Buck's letter again emphasizes the importance of being *thorough*. In any persistent ailment, in child or adult, examine from head to heels; it will often save a lot of embarrassment and possible humiliation.

And yet—somehow—we don't just feel that Dr. Buck is right in this case—and that we were! And quite possibly "C. M. F." —as well as many readers of CLINICAL MEDICINE—agrees with neither of us. So it is still "up to" the "family."—ED.

PRESCRIBING VS. DISPENSING

A San Francisco physician with a large practice was called to a case of nettle-rash. He asked for some soda, dissolved three teaspoonfuls in water to be taken in three daily doses. It worked well. The patient used it herself several times and told all her friends just how to do it. If the doctor had dispensed some 5-grain tablets of sodium bicarbonate he would have received more calls from the same patient and his fame for this condition would be scattered broadcast.

F. POLLARD.

Calpella, Calif.

THAT CASE OF NEURALGIA

I think the diagnosis of C. M. F., concerning his case of "postgrippal neuralgia," page 1152, September CLINICAL MEDICINE, was correct, except that he failed to consider the possibility of hysteria as an element. Notice the picture: A well-nourished boy on the verge of adolescence—coddled. Three or four months' sickness; naturally rather reticient; wants to be alone; paroxysms of pain suddenly cease on mother's trying to call the physician; screams with pain and then suddenly stops to whistle.

The doctor did not miss it on the therapeutic side; but he should have "treated" those parents. They were hysterical. The very inhuman treatment he suffered from them was like the spirit of demoniacal possession of the sixteenth century—hysteria. When you can not get the confidence of the mother get that of the child. The father would not have dared to say a critical word to the doctor concerning his "physic" had he held that boy's heart in his hand. The child molds the thoughts of the mother and they together can govern the father.

Doctor, down in your heart ask yourself what great secret the last physician had

which was superior to your own good sense. He was a man like yourself, and all that he did more than you was to hold the confidence of the child. When you see parents or friends becoming anxious have a private conference with your patient. Your mind will then be in a condition to weigh the facts in the case. Naturally the anxious mother's fears so unconsciously enter into the case as to modify actual facts.

Evidently the boy's mind was sick and not his body, for his body certainly would have responded to so rationally applied therapeutics. J. C.

——, Kansas.

—:o:—

There is a wealth of wholesome reasoning in the cheering, optimistic philosophy of J. C. The most *human* physician, other things being equal, is the one that will have the best success. The doctor, of all men, should be a man with a big, generous, loving heart, of large sympathies—one who can feel for and get into the most intimate touch with his patients, big and little. He must like them and make them like him; and if he can do this his remedies certainly *will* act better, especially if he has cultivated that feeling of confidence in himself which comes most certainly to those who not only know their own powers but know and have faith in the tools they use and the remedies they employ. (That's why "our fellows" pretty much have things their own way!)

As to J. C.'s diagnosis of "hysteria"—well, we have our doubts. The child was "coddled"—no doubt; but we are inclined to think that something very material really was the matter and we have already given our ideas. The spoiled child is of course inclined to be more "nervous"—as the mother would say—but that hardly justifies a diagnosis of hysteria.—Ed.

UTERINE HEMORRHAGE

With reference to the editorial comment in the August, 1907, number of Clinical Medicine, page 1035, on "Uterine Hemorrhages," I wish to say a few words.

In March, 1903, I was called to see Mrs. F., a multipara, who was having a severe hemorrhage following a miscarriage, the fetus having been passed before I was called.

I scraped and washed out the womb and checked the flow with ergotin, as usual, but the flow would start up, then stop and start again, repeatedly, in spite of all I could do, such as repeated douching and cleaning out of the womb and administering ergotin, atropine, fluid extract of ergot, hamamelis, viburnum prunifolium, and viburnin. The bleeding kept up off and on for over six weeks, when finally a brother physician advised me to try a saturated solution of acetanilid locally. I made a supersaturated solution in warm water and injected one dram into the womb with a "uterine, or deep urethral, syringe." The flow stopped at once and the one injection put an end to the trouble. I have since tried the acetanilid solution several times, with good results, in similar cases.

Geo. M. Lewis.

Buffalo, N. Y.

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Antipyrin is a well-known styptic, locally applied. Possibly acetanilid, which is chemically closely allied to antipyrin, acts in a similar way.—Ed.

ALCOHOLISM: A REPLY

In the August number of Clinical Medicine Dr. S. Henry gives his view of a phase of alcoholism which aims at a much neglected part of this great subject. Now, physicians have little time for politics, and medical journals less room; but our views as medical men are not without value.

A subject of such vast economical proportions as alcohol, that reaches $1,500,000,000 annually and enters into the etiology of more disease possibly than any other one cause, is excuse enough of itself to demand some thought.

Why not strike at the fundamental cause and relieve the wives and children at one blow? The only solution that I can see is total and absolute prohibition,

the same as with cocaine and morphine. Not regulation but absolute suppression. The liquor traffic can be handled as easily as the matter of prostitution—and with as much difficulty, as I am aware that alcohol will still be made, sold and used; but you and I will have washed our hands of it and then being illegal its traffic can be punished.

The day, however distant, that alcohol ceases to be an etiological factor in pathology, that day will demand a revision of our text-books on etiology, pathology and treatment.

But not only the wives and children will cease their cry and plaint but the medical man will find it easier to "make ends meet." That fifteen hundred million dollars will be diverted into legitimate trade channels. How often do we see money spent for rum by those who never pay their doctor.

Should total prohibition become legal today it would be a long time before the effects of alcohol would be lost and medical men would still have much to do to heal broken hearts, repair renal epithelium, renovate hepatic cells and soften sclerotic vessels.

Frank B. Kirby.

W. Philadelphia, Pa.

HOW THE ALKALOIDS HELPED TO SUCCESS

We cannot conceive, with all the authentic proof that has been printed and promulgated, why the brethren (some of them at least) manifest so much hesitancy in trying alkaloidal medication, and especially with the Abbott institution as a living monument of its growth in the past few years. Now, Brethren, I was a skeptic myself for several years, but there was a physician near me with whom I was often thrown in contact as counsel who used alkaloidal remedies altogether, and he urged them upon me. Moreover, I watched his work, and could not but admit that he relieved his patients more promptly and with much less medication than I did. Therefore, by coming in contact with him I gradually absorbed from him the use of some of the alkaloidal remedies and would visit a patient and would leave a full course of both the new and the old. Invariably on my return visit I found that the new had been sufficient and the old not used. Finally I found myself leaving all the old remedies out of my buggy case and filling it with alkaloidal preparations.

Thus I became an "alkaloidal doctor," and today I am very proud of the change. The remedies seemed at first a little more expensive, which is not correct when you figure what you throw away of the old, as untrustworthy. Human life is at stake and your reputation is in the balance. Can any remedy be expensive that safeguards these?

I want to say that with calcidin in my grip I laugh at croup, whooping-cough, bronchitis and all kindred troubles. With anodyne for infants I defy infant colic and all the infantile pains. With croton-chloral I snare all the spasmodic pains of the adult. With H-M-C my daughter and I get the baby without the mother knowing it until all trouble is over and she is presented with her little one, only to smile and utter effusive thanks and gratitude for easy and painless delivery.

Now, gentlemen, why not try to get out of the old rut as I did? O, you will feel so much better, have so much more confidence in yourself, and will be so thankful to Abbott and me if you will but honestly and judiciously try. Brethren, I am writing this for your good, nothing more—also for the good of your patients and your own purse. Under the old treatment I was losing confidence in drugs and was almost ready with "Osler" to exclaim, "Throw physic to the dogs." I dreaded to make my visits to the sick, feeling and knowing I was not relieving them, and was taking their money for naught. But now I go cheerfully into the sick-chamber, feeling that I will be greeted with smiles because my remedies act just as I promised they would.

This is no far-fetched story, neither is it drawn from imagination, but it is built on solid facts, after twelve years' experience

with alkaloidal products, as you will surely find after careful and judicious trial of the same remedies. True, at first the people would ask me if I had turned homeopath, and it took some little time to convince them otherwise. However, they soon learned, as I did, that pure medicine in small doses, oft-repeated, was "the thing." Today some of them will come after medicine and will remind me to be sure to give them the little pills (or tablets as the case may be) that they take often and in small doses.

And now let me again adjure you to give this serious thought and action. I hope in my heart to be the means of at least helping to pull you out of the old rut and sending you on your way rejoicing.

B. P. Watts.

East Galesburg, Ill.

DERANGEMENT OF THE LIVER DUE TO CHRONIC MALARIAL AUTO-INTOXICATION

Among persons who live in a low, marshy climate malaria is very common, in all of its numerous varieties and types. One special type of malarial poisoning that does not present the ordinary malarial symptoms is to be found in the low countries and marshy land along the Atlantic coast. I call it for my own identification "acute miasmatic autointoxication," though it is really a chronic condition brought to an acute stage by exposure to cold, dampness or reinfection with the plasmodia malariæ.

The first symptom is a slight derangement of the digestive organs, which in a day or two becomes greatly aggravated, causing much nausea and severe vomiting. There are cramp-like pains in the muscles of the limbs and the abdomen, and the stools are loose and frequent one day and the patient is severely constipated the next day or two, whereupon the bowels are opened again with a serious diarrhea for a couple of days more. There is no temperature whatever at any stage of the attack, though the urine is dark and scanty and the patient complains of "hot flushes." The tongue is heavily coated, breath very sour, and the mouth dry. The pulse and heart-action vary with the general condition of the patient.

The liver is very much enlarged and tender on pressure. There is great weakness and debility, and the patient complains of a "sense of heaviness" or dull ache over the eyes. Usually there is an abundance of perspiration at night and the patient feels chilly most of the time. There are no skin eruptions, no chills, no severe pain, no elevation of temperature and no pronounced malarial symptoms. There will always be a history of malarial fever some one, two or three years previous to the attack.

After vainly "reading up" and finding no disease giving anything like the above symptoms, I began to experiment as to treating such cases, and have had very excellent results with the following treatment:

I always begin by giving calomel, pepsin and sodium bicarbonate in large doses. Then I give the following:

Quinine sulphate .....grs. 2
Strychnine sulphate .....grs. 1-200
Ferrous sulphate.....gr. 1-2

M. et. ft. pil. No. 1. Sig.: One such pill every hour until ringing in the ears is noticed.

I put the patient on a light diet, keep him in bed for three days, and give calomel, gr. 1-4, and podophyllin, gr. 1-10, every night. As soon as the quinine, strychnine and iron begin to work, the vomiting ceases. After all symptoms subside I put the patient on a general tonic containing a little quinine and arsenic.

Under the above treatment the attack lasts only two or three days at the most. My main idea is to open the intestinal tract, clean it out, stimulate the liver and counteract the malarial plasmodium.

C. de J. Harbordt.

Dover, Del.

—:o:—

We believe that in these malarial infections, both the acute and chronic forms, intoxication by the bowel-contents plays a far more important part than most physicians imagine. Fecal poisoning throws additional work on the liver, already overworked, and adds to the burden of the or-

ganism in its efforts to repel the specific infection and dispose of the poisonous waste incident to the disease. If this intestinal factor can be eliminated from the disease the large majority of cases will be relieved or cured with slight difficulty. For this reason we clean out thoroughly with several small nightly doses of calomel and podophyllin (1-6 grain each) followed by morning doses of a saline laxative, keeping the bowels thereafter as nearly aseptic as possible with the sulphocarbolates. Repeat the calomel and podophyllin occasionally but use the saline daily.

We rarely give large doses of quinine. In practise we have found that quinine hydroferrocyanide, given in small repeated doses, is one of the most effective remedies in malaria. It may profitably be varied with the arsenates, especially those of quinine, iron and strychnine; these are of peculiar value wherever there is a tendency toward chronicity. Nuclein is also valuable, since it stimulates the protective forces in the blood. We believe that anyone who will "go after" this autotoxemic element in his malarial cases, making elimination and intestinal antisepsis prominent parts of his treatment, will be much gratified by the results. Try it, Brother.—Ed.

CIRCUMCISION

I would suggest that circumcision for cleanliness's sake be done away with as it is imperative to wash the penis anyhow. Partial circumcision is an intellectual error, as the glands of Tyson continue to secrete their ill-smelling sebaceous matter, which becomes very noticeable to other men when the short remaining prepuce falls back.

L. M. Young.

Chicago, Ill.

A CASE OF MORPHINE IDIOSYNCRASY

After reading in your valuable journal the experience of Dr. C. S. Witham, of Lawrence, Kan., with formaldehyde, I concluded to give my personal experience with a hypodermic injection of morphine sulphate for an acute attack of sciatica. I injected about gr. 1-3 and in less than two minutes I thought it would set me on fire. My scalp and palms and the soles of my feet seemed to be the worst points, although it was all over my body with that prickling, burning sensation. I have had the same thing to happen me about three times. It lasted only about five minutes and passed off. I could not account for it unless I left some air in the syringe. Having never heard it mentioned before I thought I was a goner at the first attack.

If anyone else has had a similar experience, I hope he will report it.

I believe we have a specific in antiphlogistine for epididymitis. I have had several trials of it and it never failed where the disease was the sequel of gonorrhea, two applications being all that was necessary to effect a cure.

W. F. Nelson.

Liberty, Mo.

IDIOSYNCRASY: ITS DISADVANTAGES IN TREATING DISEASE

This subject, while not new, being known to the early writers, nevertheless has never been thoroughly understood.

The word "idiosyncrasy" is derived from the Greek language, meaning "to mix, blend, mingle," or, in other words, describing a combination of attributes that make up the peculiar disposition of the individual; hence, when applied to medicine, it means a peculiarity of constitution and susceptibility occasioning certain peculiarities of effect from the impress of extraneous influences of agencies. The different temperament of different individuals may be recognized by external signs, but not so with idiosyncrasy. This comes to the physician by experience only, or from information imparted to him by another physician who has had an intimate acquaintance with the constitution of the patient in question.

Idiosyncrasy has, from time to time, been divided into many forms, and thus we classify them as congenital and acquired, mental

and physical, permanent and temporary. Idiosyncrasy may manifest itself through the system generally or through the special senses.

Articles of ordinary diet may in certain individuals demonstrate this idiosyncrasy; the urticaria following the ingestion of certain fish, lobsters and oysters are examples familiar to most physicians. Certain individuals have been made very sick by eating strawberries, nor are these cases where the patients ate large quantities of the fruit. The writer knows a young lady who has been thrown into convulsions on several occasions by eating one medium-sized strawberry. It occurred several times before the true cause became known. A young man of the writer's acquaintance is made violently ill by the mere taste of honey. The heart acts badly, his skin is cold and clammy, his face is pale with an anxious expression, the pupils are dilated and vision impaired. The writer had a lady patient a few years ago who could not tolerate the odor or taste of peppermint, the smallest quantity brought near her bringing on vomiting.

The violent action of medicinal agents in idiosyncratic individuals forms a most interesting and important study. This disposition is manifested in purgatives, for example, some acting with so much greater violence on some individuals than on others, such as rhubarb and manna which have been known to produce violent vomiting and purging in the ordinary dose. So also every physician knows how easily some patients are salivated, when others can take small or large quantities of mercury with impunity. Opium and belladonna also come into this category.

Thus a few years ago I experimented with belladonna upon a lady whose idiosyncrasy for this drug was very marked. The first time I prescribed the drug was in a rather small dose, when the symptoms produced were alarming. The whole body was covered with a scarlatiniform rash and there were marked toxic symptoms. Several months after I had occasion to prescribe for her again. I put into the mixture a quantity of the drug, equal to about one-thirty-second of a dose. This minute dose promptly caused rash, dilated pupils and dryness of the throat. This lady had no knowledge of what she was taking. In another patient the application of a belladonna plaster produced the same train of symptoms.

Chloral is another drug that in some individuals produces alarming and even fatal symptoms when only the ordinary dose is administered. Every practitioner knows how very prone the inhalation of chloroform as an anesthetic is to act with uncertainty. This can only be accounted for by idiosyncrasy in many cases. The writer knows a patient who is so susceptible to the action of iodine and its compounds that painting a small portion of his skin once produced a very annoying rash. Ipecac produces a condition resembling asthma in some individuals, even when administered in very small doses. It is not uncommon for the application of a cantharides plaster to cause dysuria and hematuria. The application of liniment containing oil of turpentine in some persons produces results similar to those caused by cantharides. There are some individuals in whom the smallest dose of quinine will produce cinchonism. The potassium salts act very peculiarly in others. Cannabis indica produces alarming symptoms in some subjects, out of all proportion to the dose given.

Many characteristics belong to the special senses, especially to those of taste and smell. These effect the person in various ways, producing faintness, nausea and vomiting. The odor of certain animals, for instance cats, rats and mice, are very repellant to certain individuals. So also the odor of certain vegetables and foods produces similar effects. A few years ago I knew a lady who was invariably made ill by the smell of cheese. Another young lady would detect the odor from perspiring feet and be made sick when it was not observed by anyone else. The physiologist, Haller, was rendered very uncomfortable by the odor of old people, though others failed entirely to detect it.

Idiosyncrasies of taste are very common and peculiar. Many instances come under

observation of persons eating clay, chalk, ashes, earth, coal-dust and other indigestible substances. Then there are those who swallow nails, pins and junk of any kind that is not too large. A step further in this direction, and we come to the maniac who devours everything in reach, no matter how disgusting.

Sounds vary in their effect upon different individuals. Grating or squeaking sounds are very painful to some, the slamming of doors or sharp reports distress others. The strains of music affect different persons very differently. The screeching sounds of the bagpipe and hurdy-gurdy have been known to produce incontinence of urine in some individuals. The writer knew a medical student who was compelled to urinate every time he smelled ether.

The sight of different objects, colors, etc., in certain individuals causes much discomfort. This cannot be explained upon rational grounds, hence must be analogous to that condition of anger and rage seen in animals when excited by gaudy colors. Some persons have a horror of darkness, others of long passage-ways, and still others of being left alone. The writer knew a gentleman who could not listen while someone related an accident or operation in which there was loss of blood, without fainting.

The physician should be on the alert to discover any idiosyncrasy his patient may have, it will not only assist him in treating his patient but may save him much trouble and anxiety by prescribing remedies that are the least likely to produce untoward effects. This is one reason why the family physician, other things being equal, can do more for his patient than the man who just comes into the family; he understands the disposition, the temperament, the idiosyncrasy of each, therefore can prescribe with greater accuracy.

But here let me say, do not mistake true idiosyncrasy for what is assumed. Knowing that such conditions do exist, there are patients who will assume very similar ones, for the purpose either of misleading the physician or of creating interest or sympathy. Many patients who declare that morphine will kill them, will sleep soundly on a dose of opium or codeine. The writer had a patient who declared she could not touch quinine, that her physician had tried on various occasions to administer it to her, but always failed; at the same time she was taking large doses of powdered cinchona without the slighest discomfort. Skill in prescribing and a thorough knowledge of physiologic effect will soon determine whether the idiosyncrasy is real or assumed.

C. W. Canan.

Orkney Springs, Va.

DISPENSING OR PRESCRIBING

Much has been said in your valuable journal concerning the doctor dispensing his medicine. In my opinion a man visiting the sick without taking with him some medicine doesn't look to me much like a doctor.

As an illustration:

There lived in a city an honest, hard-working man with a family of small children. One night his good wife woke him up, telling him to run for the doctor, for the baby had the croup. He dressed as quickly as he could and struck out for Dr. Prescription. When he arrived at the doctor's home he told him that the baby had the croup and to come at once, as he thought his child was dying.

The doctor came in a hurry, examined the child, and then took from his pocket a prescription pad, wrote a prescription (perhaps for calcidin), handed it to the father and told him to take it to the drug-store and get it filled.

The father said to the doctor: "My child will choke to death before I can get the medicine. Why didn't you bring the medicine with you?"

The doctor said he did not know what the child needed until after he had examined it. The father struck out for the druggist and his thoughts ran something like this: "The next time I need a doctor I'll get one who carries his medicine with him."

The child died.

One cold morning Dr. Prescription was awakened by his servant, who informed him that the water pipe had burst and was flooding the house. He went to the telephone, called up the plumber, told him what had happened and asked him to come at once. The plumber came, examined the hole, took from his pocket a pad of blank paper and wrote a prescription for the tools he needed to make the repairs; he handed this to the doctor and told him to take it to the shop and have the order filled.

Said Dr. Prescription, "My house will be ruined before I can get back with the tools. Why didn't you bring them with you?"

The plumber replied, "I did not know what I would need until after I had examined the pipe."

The doctor frowned, but struck out for the plumber's shop and perhaps thought something like this: "The next time I send for a plumber I'll send for one who will bring his tools with him.

The house was ruined.

The plumber, in my opinion, has the same right to go without his tools as the doctor to go without his. There was a time when it was very inconvenient for a doctor to carry his medicine with him. But not so now, because the good things are put up in small packages.

G. A. Budd.

Frankfort, Ky.

AN EXPERIENCE WITH NUCLEIN

For eighteen months I wore along in a weak condition, especially my knees and legs being weak. I had little appetite, my digestion was poor, bowels irregular. All the time I used two digestive pills before meals and two intestinal antiseptics one hour after meals. As a tonic I took strychnine arsenate for a while, alternating with triple arsenates. I continued about the same, weighing 115 pounds. I had nuclein, fluid and tablets; had given it to some of my patients but did not think I ever saw any results from its use. However, about two months ago I concluded to try it in my own case. I commenced taking four triple arsenate granules and three nuclein tablets (two drops) twice a day at about 11 o'clock a. m. and 5 o'clock p. m. In a few days I thought I felt a little better (a little stronger), and after using it ten or twelve days I weighed 119½ pounds, and on the first day of this month (June) I weighed 130 pounds. (My average weight when younger and well having been 133 pounds.) Was it nuclein? If this thing continues a while longer I shall be hunting an antifat remedy, sure thing.

M. W. C. Frazier.

Carrizo Springs, Tex.

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Certainly looks as though it *was* the nuclein—doesn't it? We think most of our readers—all who have practical experience with this remedy—will agree with us in ascribing the benefit largely to it, even though there are scoffers who doubt its therapeutic efficiency.—Ed.

A FEW FACTS

Two multiplied by three equals six. A true mathematical principle, no room for argument unless it is from someone who is ignorant of mathematical principles and does not know the multiplication table.

"Clean out, clean up and disinfect." A true therapeutic principle in the treatment of the sick. No room for argument; wise people do not argue about facts.

The smaller the amount of the pure active principle of a drug that it takes to produce the desired physiological action the better the result. No room for argument.

Alkaloidal practice will lessen the size of your medicine case and increase the size of your bank account—no room for argument, try it.

Use the active principle of drugs and you will get more of the active principle (cash) out of your book accounts. No room for argument. Try this also.

Break down the walls of educated beliefs, theories and prejudices and you will

advance. This also does not permit of argument.

The world has been demanding purer drugs and more certain therapy. It is getting it. The pure-food law arose out of the crying needs of the people for pure food and drugs.

The people want better steel rails. They will get them. The people want broad-minded physicians; they will get them also.

The time is fast approaching when concentrations and purity will be the motto of the world. Concentration and purity of thought is giving the world its reforms and modern inventions. Who can argue that the above is not true?

In this sphere of action if you do not observe the "signs of the times" but persist in "being a lemon" there will come a time some day when you will be squeezed and you will find yourself a dried up "peeling" with no active principle that anyone wishes to extract from you.

E. C. Stueman.

Hartford, Iowa.

HYDROCHLORIC ACID IN TYPHOID

And the peans—of the ages.
Like the bears—within their cages
Ruthless toss—archaic ideas
To and fro—To and fro.

Yes, that's good poetry, and fully explains the situation; that's what I've been doing. But, mark you, out of the golden west cometh one, Dr. Robertson, who with the utmost ease, and with the most beautiful and soundest of logic first proves me entirely right, and immediately follows it up by proving me just as entirely wrong. Incidentally (the doctor's too polite to come right out and say it) he brands me as making that mistake: old as the hills, prevalent as whisky, rotten as punk, viz., treating the disease instead of the patient. Dr. Roberston nonchalantly winds up his half column of sound horse-sense with the following valuable diagnostic pointer: "White tongue, indicates alkalies and red tongue acids, in fevers as well as in other diseases, as a rule." By Jackson! he's right, nothing molds until it ferments and nothing ferments until it first turns sour. The next one I get with a bright-red uncoated tongue gets acidulated. Have a care it isn't you. If you're curious to see what's driven me to cover, you'll find it on page 1033, August number, 1907, of The American Journal of Clinical Medicine. It's headed "Hydrochloric Acid in Typhoid."

L. Thompson Clason.

Urbana, O., R. F. D. 7.

MORE GOOD OPENINGS

We have applications in our office for two physicians, one in Idaho and the other in Florida. The Idaho location is to assist a doctor who is 70 years old and wishes to retire from active work on account of his health. He has the only hospital in the county and is a very successful man. A splendid opening for some young fellow who has alkaloidal ideas and a touch of western energy.

The Florida location is in a northern community among excellent people, where there are good social advantages, hunting and fishing, and, furthermore, a good opportunity to work up an excellent practice. Our informant suggests that a man coming there should have money enough not to be dependent on his practice at first. A fine chance to start a sanitarium. We think this is a good opening and believe that it will grow constantly better.

MISSISSIPPI VALLEY MEDICAL ASSOCIATION

The thirty-third annual meeting of the Mississippi Valley Medical Association will be held at Columbus, Ohio, October 8, 9 and 10, under the presidency of Dr. H. Horace Grant of Louisville, Ky. The orator on Medicine will be Dr. George F. Butler, of Chicago, Ill.; and the orator on Surgery, Dr. Frank D. Smythe, of Memphis, Tennessee. An excellent program has been arranged, among those to take part being such men as T. D. Crothers of Hartford, Conn., M. L. Heidingsfeld

of Cincinnati, Ohio; G. Frank Lydston, Chicago, Ill.; J. B. Murphy, Chicago; Curran Pope, Cincinnati; C. A. L. Reed, Cincinnati, and many others equally good.

The "Mississippi Valley" is one of the strongest and best of our societies and every one who attends its meetings is assured of an intellectual treat. We advise every one of our readers who can get away to take this meeting in.

THE TONGUE—AND ACIDS AND ALKALINES

I note in the August number of CLINICAL MEDICINE the statement by Dr. J. A. Robertson, of Hot Springs, Ark., who says: "white tongue indicates alkalis, and red tongue acids, in fevers as well as in other diseases, as a rule."

Does the doctor mean to say thereby that white tongue indicates an alkaline condition of the system, or, that alkaline medication is indicated, and that a red tongue indicates an acid condition of the system, or, that acid medication is thereby indicated?

About eight years ago I retired from practice, but have not quite, or entirely, ceased to observe the curious, to me, sayings of some of the younger ones now on the carpet. Dr. Robertson is on the right track, but evidently made a mis-statement. I am after him. Doctor, kindly tell us through CLINICAL MEDICINE just what you mean. As I have another understanding, let us get together.

THE AMERICAN JOURNAL OF CLINICAL MEDICINE is continually improving in quality of contents. The editors and contributors are becoming more virile, more entertaining, more alive, and drawing to a keener edge. On the arrival of each new number of CLINICAL MEDICINE I cannot sleep until I have looked over the entire contents.

M. J. H.

——, New York.

A "CURE" FOR OLD AGE

Recent publications in popular magazines have referred to the belief attributed to Professor Metchnikoff that the demoralization of the cells in old age, which causes some of them to devour the rest and otherwise to behave in a highly improper manner is due to the presence in the body of an irritant poison. If such is the case, then it would follow, apparently, that the cure of old age would be discovered by the man who could remove from the body these poisons. These poisons can be nothing else than the waste products which are not perfectly removed by the eliminating processes. We do not know of any vegetable or mineral substance that can be employed to remove them without injury to the tissue. But, I should like to suggest to the medical profession, of which I am not a member, that nature has provided a laboratory where this most valuable "elixir of life" is being produced annually in sufficient quantities to relieve many of us at least of the burden of old age.

Snakes never die of old age; they die from injuries and from disease only. In the spring the serpent experiences a change in his constitution; an unknown secretion flows into its blood from certain glands which are rudimentary in man, or only imperfectly developed from the standpoint of the serpent's system (as the most perfect physiologically). This causes a sort of a cast to form along the alimentary canal of the animal, thereby depriving it of its appetite, and at the same time a cast forms under the skin of the animal and over the cornea, blinding it. As a consequence of these processes the quantity of the unexcreted organic salts (the irritant poisons of Professor Metchnikoff) that has accumulated in the body of the animal in the preceding year is dissolved and eliminated and the serpent comes out of these changes minus the irritating substances that cause old age in other animals.

According to Livy the army of Regulus encountered at the River Bagrada in the Punic War (the second I think) a serpent 120 feet long. It was beseiged like a fortress and finally killed by balistæ. Its skin and jaws were preserved in the temple of Juno at Rome down to the time of the Numantine War. Suetonius tells of a

serpent that was exhibited at Rome in the time of Augustus that was seventy-five feet (50 cubits) long. A boa was killed in the Malay Peninsula in November, 1880, that was between forty and fifty feet in length, and I have read in some quasi-scientific publication that a python of some kind was killed in the Philippine Islands in 1898 that was forty-eight feet long. I have read of, but have never had definite information that I could consider reliable, black snakes that were twelve and even fourteen feet long. Black snakes of such size would be as remarkable as Livy's serpent.

The conclusion is: Let the doctors compare the glands of the serpent in the ordinary state and when they are aroused to the peculiar activity that marks them at the time preceding the casting of the skin. Whatever would dissolve the insoluble organic salts in the body of a serpent would do the same for any other animal. Just as the sexual glands of those animals which experience the "rut" in the spring are peculiarly active at that time only, so in the serpents there are certain glands which at ordinary times function the same only as the same glands may be supposed to do in animals like ourselves that are not immortal. For the snake is certainly immortal; within his scaly hide he carries the secret of perpetual youth. If I can't get some of you fellows to look this thing up for me I intend to do it myself as soon as I can afford to quit the law business. Already I am told that several gray hairs have appeared on my temples, and this appears to be unnecessary and absurd so long as the supply of black snakes in Indiana holds out.

WALTER F. COOLING.

Chicago, Ill.

—:o:—

In the eternal fitness of things the serpent, which was responsible for the "fall" of man, *should* be the one to supply that elixir longæ vitæ about which philosophers have so long dreamed and for which alchemists have delved among the mysteries. We sincerely hope that Mr. Cooling may succeed in extracting the long-sought alkahest which shall dissolve out the poisons of our abbreviated existence and give us all length of days; also, that the supply of snakes in Indiana may hold out till we are all supplied. Kindly enter an advance order for the members of the "family!"—ED.

AN IMPORTANT GENERAL REPORT ON H-M-C

Dear Doctor Abbott:

I have yours of a day or so ago in regard to the H-M-C Comp. When your Doctor Paxton was here I was telling him of my limited experience with it, and he also said you would be pleased to have a note from me regarding it; so, while I have no disposition to intrude on your time, I shall give you a short resumé of my experience.

My first experience was with a lying-in patient. She was confined on Sunday evening under rather unhygienic conditions. My wife was quite sick just then, so I instructed the husband to telephone me if his wife were not all right, and that, unless I heard from him, I should take it for granted she was doing well.

On Thursday afternoon he came to town and said his wife was quite "poorly" and wanted me to see her. Anything that goes wrong with a parturient woman always makes little chills run up my spinal column. I have attended over 900 women in my career and have never yet lost one that I attended personally.

I went out at once and found her with a temperature of 105°F., and her skin the color of smoked ham, showing some form of severe autointoxication from the gastro-hepatic tract. She was tympanitic and very tender, but there appeared no trouble with the uterus.

Her clothes had not been changed since her confinement. I at once gave her a full-strength H-M-C tablet. She was snoring in ten minutes, and my hair began to rise. I pulled her across the bed and, with a lamp held up in front of my head, and using a good head-mirror, I thoroughly cureted the uterus, then cauterized it with carbolic acid

and iodine, equal parts, then mopped it with ichthyol, then pushed one of your glycero-magnesium suppositories clear up to the fundus, then put another one up against the os, and packed them up with a cotton tampon, soaked in boroglyceride. (How was that for a "homeop" start?) I then "ordered" her mother to bathe her all over in hot water. We changed her clothes and made her comfortable, she sleeping quietly all the time, moving as we told her to, but not seeming awake. I left some other medicines, among them a large calomel purge, I felt a little uneasy all night, but on going out the next morning, found the temperature down to 100°F., pulse 90, free perspiration. Bowels moved freely, and she went on to a normal convalescence. She said she remembered nothing after I put the medicine in her arm.

My second experience was in removing some tubercular glands from the neck of a 16-year-old girl. One dose one and one-half hours before operation, a second about twenty minutes before, then about twenty or thirty drops of chloroform. The glands were rapidly dissected out and wounds sutured and dressed. She slept for ten hours after, awaking without pain or other disturbance.

Third case: Small fatty tumor; two doses as above, tumor quickly shelled out without any chloroform.

Fourth case: Operation for hemorrhoids. A dram or more of chloroform had to be given, in addition to the two tablets, before dilation of the rectum could be completed. Then the hemorrhoids were burned off with some small irons made for the purpose and heated in a tinner's gasolin furnace.

I have used the H-M-C in a number of ordinary cases where a hypodermic of morphine was indicated, without nausea following in any one, and last Saturday morning I used it in a very severe attack of angina pectoris in a woman about 42 years of age. She was free from pain in ten minutes, slept the rest of the day and awoke without pain or inconvenience of any kind.

Now, this very limited experience has been to me very satisfactory. I have felt a little timid about using anything so powerful, as it shows itself to be, but have gained confidence with experience.

I have used the H-M-C in five obstetric cases, with good results, especially in one where there was no dilation and a rigid os. I gave a half dose, left on a long drive, returned home at 11 o'clock, when a hurried message awaited me. I went up, it being my neighbor's wife, found the head was almost born, and she was having a quiet time, with little suffering. Child was well.

I listened with a good deal of interest recently, at the meeting of the Linn County Medical Society, to the experience of Dr. Bradley, of Cedar Rapids, who has used the H-M-C in thirty surgical cases, and reported no untoward effects of any kind. There is an even balance of some kind, somewhere, that synergizes the effect of the morphine and at the same time neutralizes its depressing and nauseating effects. (Cactin.—Ed.).

It seems evident that there is a clinical difference between hyoscine and scopolamine, even though they be of the same chemical formula. What it is, is beyond the ordinary practician, and remains for the chemical and therapeutic specialists to work out. Results are what count with us.

W. Woodbridge.

Central City, Ia.

NEW SUBSCRIPTION PRICE OF CLINICAL MEDICINE

On January 1, 1908, the subscription price of Clinical Medicine will be advanced from $1.50 to $2.00 a year. This increase of price is made necessary by the constantly increasing cost of production and in order to enable us to improve the journal along lines which we believe will place it far beyond any therapeutic publication ever printed or attempted. In order, however, to enable everyone to renew at the old price for as long a period as they may desire we give this advance notice. Why not send in $7.50 and secure Clinical Medicine for five years?

The first of January we expect to inaugurate our new Postgraduate School in

Therapeutics. Ample space will be given to this educative work in the columns of CLINICAL MEDICINE, which will be the medium through which the lessons will be published. The work of this school will alone be worth many times the subscription price of the journal. In addition we expect to broaden out with a department giving a complete record of the therapeutic progress of the world—just the best and most helpful and most practical stuff ever published. Better material in every department will be our aim. The members of the "family" think that CLINICAL MEDICINE is about the best journal published *now;* but we are not contented to stand still. We want to grow and keep on growing, and to do this we must have your help, encouragement—and dollars. Better send in your subscription for two, three, five—yes, or ten years today, while the price is only $1.50.

A convenient premium order blank for new and renewing subscriptions will be found on page 45 of the advertising department.

ANOTHER FRIEND OF THE CLINIC

On this page of our Journal will be found another picture showing the beautiful residence of one of our good friends. One of the doctors who had a picture of his house printed in a recent number of CLINICAL MEDICINE has written us that he has already received letters from a number of members of THE CLINIC "family" asking for the plans of his house. We are sure that Dr. H. T. Dunbar, of Candor, N. Y., who is the owner of the home shown on this page, will also receive requests for similar information.

And that reminds us that it would be an excellent idea for some of our friends who have homes that they think not only beautiful to look at on the outside but nicely arranged on the inside, to send us photographs of the exterior and plans of the interior, especially when the arrangement for professional work and for real "homeliness" seems to them unusually good. This is one of the ways by which we can help one another.

HOME OF DR. H. T. DUNBAR, CANDOR, N. Y.

The editor confesses that Dr. Dunbar's home looks "awfully" good to him. He would be willing to live in it himself or in one just like it.

AUTOTOXEMIA—NOT INSANITY

June 21 I was called to see a farmer, age 32 years, a man of ordinarily good habits. He had not been feeling very well for three or four weeks, and had often complained to his neighbors of an "uneasy, bad feeling"—as he described it.

The history disclosed the fact of intoxication, accompanied by delusions, immediately preceding the attack, the latter becoming even worse after the patient became sober. When I saw him first he was suspicious of everyone and everything, positively refusing to take medicine, under the delusion that we were trying to harm him.

When questioned he said that he "felt all right," but on physical examination I found extreme tenderness in the region of the liver, kidneys and over the entire abdomen. The bowels were tympanitic; the tongue was heavily coated, dry, at least three times its normal size and surrounded by deep depressions made by the teeth, which bore deposits of sordes; the breath was foul; the pupils were contracted but readily reacted to light; and there was complaint of frontal headache.

The bowels were found to be acting once a day—constipated; he was passing two to four drams of urine twice or three times in twenty-four hours; the mouth was extremely dry and the skin dry and harsh with a glistening appearance. There was a temperature of 99.4° F., pulse 78.

I made a diagnosis of autotoxemia.

Treatment was as follows: Elaterium, gr. 1-6; calomel, gr. 1-6; podophyllin, gr. 1-6; leptandrin, gr. 1-6; colchicine, gr. 1-134; emetine, gr. 1-67. These were enclosed in a gelatin capsule, directing one such capsule every hour for six doses to be followed by effervescent saline laxative. Immediately after the bowels acted this was to be followed by cicutine hydrobromide, gr. 1-67, (two granules); hyoscyamine, gr. 1-250; emetine, gr. 1-67; strychnine arsenate, gr. 1-134; together with two tablets of the intestinal antiseptics (sulphocarbolates) to be given dissolved in hot water every two hours.

June 22 the patient was found considerably relaxed, the bowels having acted twelve or fifteen times, the stools consisting of a large quantity of bad-smelling matter containing mucus. The patient had refused to take the last-mentioned medicine (except two doses) and still had delusions, with rebellious tendencies. I advised pressing the remedies to positive effect, and that night secured good rest, the pulse dropping to 66, then to 60, the temperature ranging about normal.

I began withdrawing the cicutine hydrobromide, the 26th inst, only to find by the evening of the 29th that the patient was growing worse, when I resumed its use, together with liberal but mild cathartics, and was rewarded by steady improvement.

July 5 my visits were discontinued and on July 10 the patient came to my office for additional medicine. Ten days or two weeks later he was attending to his regular duties.

I wish to state further that two days before I saw the patient his family had attempted calling me but I was out of town, and when I was finally called, June 21, their one idea was to transfer him to an insane asylum. I protested, stating that such action not only was unnecessary but wrong.

F. F. Lemon.

Lincoln, Mo.

—:o:—

If there is any disease where fecal absorption does not play a part, and often a very serious one, we do not know what it is. In few conditions is this more decided than in certain forms of insanity. This is a fact that no physician should ever lose sight of. The improvement in the mental state which will sometimes occur in these acute cases after cleaning out and keeping clean is at times really remarkable.

If we should make any criticism of the doctor's treatment it would be in regard to the *number* of his remedies. Probably just as good elimination from the bowels could have been obtained with fewer cathartics—either calomel and podophyllin alone, followed by the saline—or by a few good-sized doses of elaterin. But—he did the work!—Ed.

CONVERTED TO ACTIVE-PRINCIPLE THERAPY

Some three weeks ago I left my home in Watertown, S. D., for a visit to my daughter in Morton Co., N. D., forty-eight miles from town or railroad. Among other reading matter which I put in my grip to help while away the tedious hours of a long journey was the July number of The American Journal of Clinical Medicine, and say, it is a "peach" from "kiver to kiver!" I have read and reread every word and have

become a convert to active-principle therapy, and when I go back to my home and begin to practise, then I shall order a full supply of granules and the library. I have never practised in Watertown, only recently moved there in a more or less tentative way. I have used your granules for several years, so am somewhat familiar with them, but could never quite decide to get out of the old rut. I really think that I never wish to open my ill-smelling old-style case again.

Now as to your contemplated postgraduate course, give it to us by all means, and put me down for the first student. And now I say, Go ahead and God bless you.

D. C. P. SMITH.

Watertown, S. D.

—:o:—

And so they keep on falling in line! The alkaloidal idea is *right;* it must appeal to any man who approaches the subject with a mind open to conviction, and with the desire to progress, to improve, to get ahead. We welcome Dr. Smith into the "CLINIC family" most cordially, and we hope that as he learns more of active-principle therapy he will tell us the story of his progress.—ED.

WHO ARE THE HEROES?

Who are the heroes? Are they those alone,
Who mid crash of shell and bullet's call,
Plunge madly on in face of fiercest foe,
And win their cause, or for it fall?

Who are the heroes? Are they simply those
Who face the flame's hot breath,
And mid smoke and seething fire snatch
The helpless from impending death?

Are heroes only those who rush in sudden fray.
And do some gallant deed of quick portent?
Is heroism not more really shown by those
Whose lives from day to day are spent

In battling with the ills of life, and who go
With forewarned vision to the dreaded things
Which silently creep upon the lives of men
And take them hence with unseen wings?

They first in life's eventful morn moor the frail bark
Of helpless birth into safe haven from the storm
Of pain and sore distress, and last, when shadows deepen
Into night of death, and breath is stilled, and form

Gives o'er the struggle, and passive peace doth spread
Her brooding wings, and with soft fingers woos
The last long smile of sweet content, on passive face,
Whose battles all are o'er, with no more foes

To face, no pains to ease, for God hath said,
"Peace, be still," and peace hath come to go no more.
These are the heroes, for they seek no titles rare,
They claim no scroll on which their names to score

But with fleeting recompense of gratitude, which lasts
Until the bill is rendered, and which, like dew
Before the morning sun, is then forgot,
And sour-faced visage their recompense in lieu.

Let us then bury enmity and jealous strife,
Remembering that our pathways lead to heights
Where we should view the broader range of occult things,
And rise on broader wings to greater flights,

Than simply seeking for the grub and worm
Of fleshly lust of greed of gain;
But feast our eyes and souls and minds
On views of earth and sky and main,

And hunt for broader concept of the plan,
Conceived by God e'er he made man;
And thus perchance get better view
Of what we were when we began.

C. F. MARSH.

Pensacola, Fla.

CARDIAC "WABBLE": FROM VASOMOTOR INSTABILITY

The inclined-to-criticize will kindly excuse the above. In no plainer language, even if inelegant, can we designate that well-known but peculiar functional state of the circulation due to instability of action of the vasomotors (lack of physiological balance) that calls for cactus grandiflorus, or cactin, its most desirable preparation.

The indication for cactin is not the pulse telling of cardiac inefficiency and calling for digitalin; neither, to the careful clinician, does it call for "the lash"—strychnine, though one or the other, often both, are not infrequently used when not needed by those who do not clearly appreciate the condition present.

It is just the cactin pulse, indicating a heart that, by reason of instability or outside disturbance, is not doing, or is not permitted to do, its normal amount of work—a weak, irregular heart, calling for neither digitalin nor strychnine but a remedy that will act as a governor, restoring its normal ryhthm and rate.

Whether the indication be a pulse which is too fast or too slow, too weak or too strong;

if the cause is vasomotor instability, as in the tobacco heart, the heart of the drunkard, some cases of menopause, overwork, etc., no remedy in the proper condition will do just what cactin will; no remedy will so quickly restore the necessary equilibrium as this; continued as required in "dose enough," no remedy will serve you better.

The mistake the unthinking make is to look for toxic effect consequent upon the use of cactin as follows the exhibition of decided doses of digitalis and strychnine, and they are therefore disappointed when even enormous doses of it are used. The laboratory man with his frogs, rats, cats and dogs says this toxic effect isn't there—and it isn't!

A straight line can't be made straighter, and while vascular balance is produced by cactin, and in a state of disequilibrium it goes but little beyond this point, why should it be carried further if it could? What more does one want?

Cactin is a balancer, and it is this peculiar balancing action upon the circulation, preventing regional dilation, that accounts for the wonderful and otherwise inexplicable effect of hyoscine, morphine and cactin compound (H-M-C, Abbott) as compared with hyoscine and morphine alone.

Without doubt in seven out of every ten times that digitalis and strychnine are used by the less careful, painstaking and exact, the needs of the patient and the purpose of the physician would be better served by cactin. Balance having been established through cactin in "dose enough," other indicated remedies should be added, sufficient of the cactin being continued to maintain the effect desired.

That the appreciating clinician is well served by this remedy is evidenced by the fact that many, many millions of these granules have been consumed at the hands of the profession and nothing but satisfaction expressed—an experience which has covered a dull decade.

TWO ALKALOIDAL EXPERIENCES

One Sunday afternoon I was called by telegram to a lady in Washington, D. C. The morning of the same day the patient, suffering severe pains, had called in a city doctor (noted as a hospital surgeon). After thumping and pounding the abdomen the latter had said it was not appendicitis but the womb was tilted against the bladder, and he would bring his instruments in the morning and operate. The patient by this time, suffering without relief and frightened at the mention of instruments, had her husband telegraph for me, and I arrived by 8 p. m.

I found the patient in great pain, with temperature 101.5°F. I put her in the knee-elbow position, and with two fingers, instead of instruments, manipulated the parts into position. I found the neck of bladder as well as surrounding parts very sensitive and inflamed. The patient told me that December 1 this same doctor had pulled by force a five-months' fetus from her and she had suffered more or less ever since.

Dosimetric trinity, Buckley's uterine tonic and vaginal antiseptic tablets were prescribed.

The next morning the fever was gone and the patient so much improved that she asked to sit up in the chair, which I allowed. At 3 p. m. I left for the train and by that time the attending doctor had not put in an appearance, but the patient was so much relieved that I could leave.

On returning home, I found my wife in a very critical condition—was prostrated shortly after I had left home. There was inflammation of the bowels, with peritonitis, and tenesmus, with slimy evacuations.

She had taken one-half teaspoonful doses (too small) of "salts," with hyoscyamine for the pain, without relief.

Taking her temperature, I found the mercury at the top of the tube. Thinking there might be something wrong with the thermometer, I took another, with the same result, so I could not tell what the temperature was. A full teaspoon of rochelle salt with two dosimetric-trinity tablets were given, and in one hour the temperature was 105°F. Calomel, 1-10 grain, was

given hourly for three doses with two tablets of sodium sulphocarbolate, and by 11 p. m. the temperature was 100°F. and the patient so much relieved that I went to bed, very tired, and did not wake up until 6 a. m. The patient said she had been up seven times on the chamber, but slept between stools. Next day the temperature fell to normal, with normal-colored evacuations.

In mentioning these cases I wish to note, first, how some of the noted surgeons scare and neglect their patients. In the second case the remarkably high temperature which no doubt was due to autoinfection from the intestines, and finally the prompt relief and success of rational alkaloidal medication.

GEO. ROBERTS.

Lincoln, Va.

ACUTE COLITIS

T. M., a civil engineer, aged 45, was seized one evening after a long cycle ride in the wet, with violent diarrhea. This continued throughout the night, and all the following day; but it was not until the second morning that a doctor was called. The patient gave a history of abdominal trouble extending over ten years. While serving in China, at the age of 35, he had suffered from a severe attack of colitis, presumably brought on by the ingestion of tainted food or water. He had recovered fairly rapidly, and at once returned to England; but a chronic irritability of the large bowel had remained, showing itself in a liablity to acute attacks of diarrhea at intervals of weeks or months. These attacks were as a rule directly traceable to fatigue, cold or indigestible food.

The patient was kept in bed, placed on a milk diet, and given bismuth and soda. No improvement resulted. Various diets were tried, to no purpose. Five or six blood-stained, evil-smelling motions were passed daily, and were accompanied by much pain and tenesmus. At the end of a fortnight a consultation was requested. A distinguished physician of European reputation was called in; he advised removal to a nursing home. This was done; but no special change was made in the treatment, except to ring the changes on various so-called "astringent" drugs. Opium was as yet withheld.

Another two weeks passed; the intestinal flux was still unchecked, and the patient, now greatly emaciated and in a pitiable state of pain and unrest, began himself to dread a fatal issue. To make his condition still worse, persistent hiccough developed, which was but imperfectly controlled by morphine. At length the patient's relatives, one of whom was a medical man, requested that a surgeon should see the case. An operation was eventually performed. The large bowel was found to be thickened and intensely congested. An opening was made in the cecum, and an artificial anus established in the right iliac region. Much to the surprise of everybody, the patient rallied from the operation. The immediate result was a stoppage of the diarrhea, so that the sufferer's state became one of comparative comfort. But his recuperative power had been reduced too low to permit of ultimate recovery, and a week later he died comatose.

I saw the above case about a week after he first took to his bed; he was then cheerful, anxious for solid food, and did not look particularly ill. A month passed before I again saw him, and he was then evidently a dying man. Early operation would in all human probability have saved his life. It is doubtless true, as Dr. Sidney Phillips states, that the disease may sometimes persist, and even grow worse, in spite of colotomy. But surely this is no excuse for non-interference. A severely ulcerated colon is to all intents and purposes a closed cavity containing a mass of toxins, and its lining membrane is especially adapted for systemic absorption. To drain, to flush, and to keep on flushing until the formation of toxic products ceases—surely no other treatment is rationally conceivable—F. HERNAMAN-JOHNSON, M. B., Ch. B. Aberd., Portsmouth, England, Surgeon, R. N.

I should like to use the enclosed clipping, from *The Lancet*, as a text. Here we have a graduate of Aberdeen University who writes about his patient as having "a severely ulcerated colon" though the postmortem says nothing of that condition but says "the large bowel was found to be thickened and intensely congested."

This presumably highly educated gentleman, assisted by "a distinguished physician of European reputation," attended this patient for four weeks, keeping him in bed, giving him a variety of diets, besides bismuth and soda, and various "so-called 'astrigent' drugs." Then a surgeon was called in who made an artificial anus and much to the surprise of everybody the patient demonstrated his magnificent vitality by living a week longer.

Not a word about high enemas, intestinal disinfectants, and so on, but the writer seems proud to mention the fact that for the first two weeks opium was withheld. Why this was denied him while he was being filled with astringents is more than I know, unless it was for fear lest the patient should receive some comfort from the ministration of his physician.

I shall not express my views on this case any farther for the same reason that the very profane man kept still after carefully leading his horse up a long hill, only to find that the tail-board of his cart had fallen out, permitting his load of turnips to distribute themselves along the ascent and at the bottom.

I cannot find language to do the occasion justice.

George M. Aylsworth.

Collingwood, Can.

TREATMENT OF PUNCTURED NAIL WOUNDS

I have been treating punctured nail wounds as follows during the last twenty-three or twenty-four years:

I first consider all punctured nail wounds to be septic. I take a very small wire (two or more if the wound is very large) and bend it upon itself and then twist it several times. I leave a fenestra at the end where the wire is bent, by bending it around a nail that corresponds as nearly as one can tell to the size of the nail that made the puncture. If the fenestra is too large elongate it by pressure. Insert the fenestrated end down to the bottom of the wound, then twist it or turn the instrument and as you turn it withdraw it slowly. You will be surprised to see the foreign matter appear at the mouth of the wound. It causes an irritation or a spasmodic contraction of the tissues around the fenestra and the foreign particles seek the vacuum caused by the fenestra.

Occasionally the wound is so small that it is impossible to insert the instrument. In such a case find the depth and course of the wound by probing, then enlarge it by inserting a very fine pointed lance to the bottom and enlarge it from top to bottom.

Dress as follows: Irrigate it with any aseptic or antiseptic you wish, according to your own belief. After cleansing it thoroughly I usually fill it with some oily antiseptic substance (such as euarol). The oil will prevent all parts of the wound from healing by first intention, which is very essential in a septic wound. If the injury is in the sole of the foot, dress the wound with some antiseptic gauze. Then cut a hole about an inch and a half in diameter in the sole of an old shoe; tell the patient to put it on and go to work. The more he walks the better as the walking will cause a pumping or suction-like action and by so doing forces the blood out and prevents healing by first intention. It may be well to wear a rubber shoe over the old shoe to keep the dressings clean. I use the instrument just described in dressing punctured wounds caused by a fork, knives, needle, a tooth, or a splinter of wood.

M. Wadsworth.

Hoytville, O.

AN OLD REMEDY REDISCOVERED

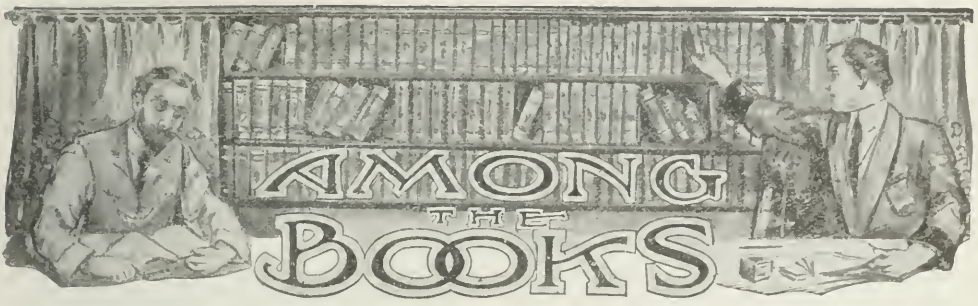
In the December number of Clinical Medicine (page 1588) Dr. J. H. Lowery claims to have discovered a prophylactic for scarlet-fever in tinct. belladonna. This will do the work, according to old homeopathic authorities, and has been known and can be found in homeopathic works dating years and years previous to this doctor's "discovering" the fact—for himself!

E. A. Johnston.

Minneapolis, Minn.

ELECTRICAL TREATMENT OF ANAL FISTULA

Billinkin, in the *Bulletin Official de la Societe Francaise d' Electrotherapie*, June, 1906, says, that for eight years he has used electrolysis in the treatment of anal fissures, but generally without noticeable results. It is, therefore, waste of time to try anything but thorough incision in this condition.



NELSON'S ENCYCLOPEDIA

Nelson's Encyclopedia: Everybody's Book of Reference. In Twelve Volumes, Profusely Illustrated. Editors in Chief: Frank Moore Colby, M. A., New York, and George Sandaman, Edinburg. Published by Thomas Nelson & Sons, New York.

There are many encyclopedias. The objection to most of them is their extreme diffuseness and the corresponding hypertrophy of price. The exhaustive discussion of a subject may be an advantage to the specialist, but for the average man who wishes to get reliable information of the *essentials* of any subject in the shortest possible time it is a distinct disadvantage. Because Nelson's is succinct (yet complete) and moderate in price—as well as for many other excellent reasons—we believe that it is destined to have a very large sale.

The writer has examined his copy of this work with great care, and with increasing familiarity he likes it better and better. In the first place, it is a thoroughly modern work. Every article that we have consulted has been found strictly up-to-date. The latest scientific work is embodied in it, even in such rapidly changing subjects as electricity and the new physics. Then the articles are lucidly written—at least in the main—so that the reader can get the maximum of information with a minimum of study. Non-important details are omitted, the work being distinctly one for the general reader. The "balance" is good, that is, the different branches of knowledge being treated according to their relative importance. And finally, it is a beautiful example of the book-maker's art, both as regards binding and printing. The illustrations are numerous and creditable.

The physician will naturally turn to the articles on medical subjects, and while brevity is the order here the result is not disappointing. Throughout we have found the information given to be accurate and modern. Nor, as in some of the other recent encyclopedias, do we find the text overloaded with twaddle concerning the tribe of healing cults and their prophets and deficient concerning medical problems and the leaders of medical thought.

It is a good book for the physician to own and we can unhesitatingly recommend it to every one of our readers who wants a reliable, concise, readable encyclopedia for which he is prepared to pay a modest price.

HERTER'S "INTESTINAL SEPSIS AND AUTOINTOXICATION"

The Common Bacterial Infection of the Digestive Tract and the Intoxications Arising from them. By C. A. Herter, M. D., Prof. in Columbia University. New York and London: The Macmillan Company. 1907. $1.50.

That the "*primæ viæ vitæ*" should prove to be, if not the "*primæ viæ mortis*," at least the "*primæ viæ morbis*," is what the revelations of bacteriology teach. And in the vast and ever-increasing labors and literature of bacteriology the book before us occupies an important practical position. Whether the reader of these lines has or has not already taken up the practice of coproscopy

(the examination of feces) extensively in his practice, he cannot but profitably enlarge his knowledge by a study of its pages. We feel like thanking the author for his labors.

LUSK'S "NUTRITION"

Nutrition: The Elements of its Science. By Graham Lusk, Ph. D., M. A., F. R. S. (Edin.), Prof. of Physiology University and Bellevue Hospital Medical College, New York. Illustrated. Philadelphia and London: W. B. Saunders Company. 1906. $2.50.

This monograph on a physiological subject is thoroughly scientific and states the knowledge of it so far as arrived at at present.

THOMAS'S "SEX AND SOCIETY"

Sex and Society: Studies in the Social Psychology of Sex. By William I. Thomas, Associate Professor of Sociology, University of Chicago. Published by University of Chicago Press. Price $1.50.

Professor Thomas bases his study of the social relationship between the two sexes upon certain organic nutritional differences. Thus he says that "femaleness is an expression of the tendency to store nutriment." Expressed in another way, the dominant characteristic, nutritionally, in determining the sex in the male is catabolism, or the expenditure of nutrition; in the female, anabolism, or the storing of nutrition. For this reason poor food or nutritional conditions in a country, community or home favor a production of preponderance of males, while the reverse condition leads to an increase in females. This fact lies at the basis of Professor Thomas's discussion of the whole sex-question in its various bearings.

An epitomized expression of the philosophy of this book may be found in the following quotation from it:

"Man consumes energy more rapidly; woman is more conservative of it. The structural variability of man is mainly toward motion; woman's variational tendency is not toward motion, but toward reproduction. Man is fitted for feats of strength and bursts of energy; woman has more stability and greater endurance. While woman remains nearer to the infantile type, man approaches more to the senile. The extreme variational tendency of man expresses itself in a larger percentage of genius, insanity and idiocy; woman remains more nearly normal."

This expresses the current which runs all through the book, in which are studied such interesting questions as the bearing of sex upon social control, social feeling, industry and morality; also the psychology of exogamy, modesty and clothing, and the mind and character of woman. The book is not only an intensely interesting one but it attacks the sex-problem from a new point of view—and an illuminating one.

GOTTHEIL'S "SKIN CANCERS"

The Treatment of Skin Cancers. By W. S. Gottheil, M. D. Third enlarged edition. New York: The International Journal of Surgery Company. 1907. $1.00.

This monograph of but 89 pages will be worth to some reader more than a thousand-page volume. Its burden is the caustic method of treating skin cancers, and this should be known to every physician and so help to take the same out of the hands of quacks and restore it to its legitimate place and redeem it from the disrepute into which the quack has brought it.

MARSDEN'S "TREATMENT OF INFECTIONS"

Hint on the Treatment of Common Infections. By R. W. Marsden, M. D. New York: E. B. Treat & Co. 1907. $1.50.

The practice of antiseptic prophylaxis and treatment has not yet so gone over into *succum et sanguinem* of the present generation of physicians, nurses and surrounding friends of patients as to make good epitomic books on the subject superfluous. In this respect therefore the book before us has an important mission and so

we urge upon our readers to get familiar with the contents of this useful volume. It contains the gist of rational modern treatment. Hydropathy, proper, and in proper cases of infection, is well detailed. It is to be regretted that the author is not acquainted with the alkaloidal therapy and the best mode of its application in infectious diseases at their onset. This aside, the book is much to be recommended. The hints on isolation, reporting, and removal of cases are quite judicious, so too are those on disinfection and disinfectants. The book has not many pages but these contain only concentrated matter.

BUDIN'S "THE NURSLING"

The Nursling. The Feeding and Hygiene of Premature and Full-term Infants. By Pière Budin, Professor of Obstetrics, University of Paris; Director of the Clinic Tarnier, etc. Authorized translation by Wm. J. Maloney, M. D., with an introduction by Sir Alexander B. Simpson, M. D., of Edinburg. One hundred and eleven diagrams in color and other illustrations. London: The Caxton Publishing Company. New York: Imperial Publishing Company. 1907. $6.00 net.

When we began practice in the early fifties of last century professorships of diseases of children went together with that of obstetrics and diseases of women. Progress of knowledge necessitated a differentiation of professorships of these intimately connected departments. Specialties in medicine with a thorough background foundation in all the encyclopedia of its sciences and arts is a legitimate outcome of knowledge increase.

The splendid volume before us is an illustration of what was just said. "The Nursling" of Budin is a monograph on a medical specialty, namely that dealing with pediatrics. And in Budin the subject has found the fostering master-hand of a thorough, patient, working physician who is ever conscious of his aim, who observes facts before he proposes a formula for practice, and withal when he teaches, as in the volume of lectures before us, he uses the pristine force of language in its simplicity, which therefore gives itself readily to be transmitted into every language of cultured humanity. The *forte* of this book is the prophylactic and therapeutic hygiene of the nursling, and therefore is this book a most useful supplement to every and even the best work on pediatrics Scales and thermometer are Budin's instruments of diagnosis (but they have to be exhaustively studied in their application), and sterilized milk is his materia alimentaria-medica.

The mission of this book and of Budin's life-work—and they have a mission—are best expressed in Sir A. R. Simpson's words in the end of his introduction: "When I look back on my own professional and professorial life no memory stings me with more sharp regret than the thought of the too little heed I have given to the needs of the neonate." (By the way, what a splendid, needful word is this last! *Esto perpetua!*) "I account it a great privilege to have been allowed to write these paragraphs by way of introducing to English readers the stirring lectures of my illustrious colleague. If they should lead some of my old students and their fellow practitioners throughout the British and the English-speaking world to lay to heart Prof. Budin's teaching and to carry out in their sphere of influence his practice—if I could be sure of this—it would go far to help me to say my "*nunc dimittis*" with something in my soul of old Simeon's peace."

LE BON'S "EVOLUTION OF MATTER"

The Evolution of Matter. By Dr. Gustave Le Bon, Member of the Royal Academy of Belgium. Translated from the Third Edition, with an Introduction and Notes, by F. Legge. Charles Scribner's Sons, New York. Price, $1.50.

We have so long been used to accept unquestioningly the conception of the "eternity" of matter that a theory that challenges its verity must be considered revolutionary. But this is exactly what

Dr. Le Bon does in this book. He endeavors, and with apparent success, to demolish the conception of matter as a dead, inert thing. Instead of this he makes it a great storehouse of energy, the real source of all the great forces of the universe, such as solar heat, light and electricity. This energy, Dr. Le Bon asserts, is *intraatomic*, that is, it is not stored energy but produced by the breaking down and destruction of the atoms themselves, and during this process the elements which they compose entirely cease to exist—as matter.

He was led to this belief by his observation of the socalled radioactive bodies, of which radium is the best example, which have been shown to be constantly emitting force or matter (whichever you choose to call it) without sensible loss of weight. He was the first to demonstrate that this property of giving off what he calls *effluves* is not confined to radium and similar substances but is really a property of *all* matter. From this point he was lead gradually to believe that all matter is undergoing this process of gradual destruction with corresponding release of energy.

Dr. Le Bon even goes so far as to calculate the amount of energy which is released in this process of change from matter to ether, from the ponderable to the imponderable. For instance, he says that a small French coin weighing one gram has within its atoms energy enough to draw an ordinary freight train more than four times around the earth; and a few kilograms of ordinary matter would really produce more heat than all the coal-beds in the world—if we could but utilize this enormous reservoir of force!

The scientific significance of this theory or its acceptability we shall not attempt to discuss. Enough to say that it is supported at every point by the author's own experiments. The conception is a great, a marvellous one, and is already commanding the attention of scientists and of the reading public. It is certainly remarkable that a book of this character should have a large popular sale in France, but this is perhaps explainable by the lucidity of style of the author which gives it a peculiar attractiveness, even to the unscientific reader. It should peculiarly appeal to the physician of thoughtful tendencies and with a general scientific trend of mind. We opine that many such will buy this book and will feel well rewarded in so doing.

ROBINSON'S "ABDOMINAL BRAIN"

The Abdominal and Pelvic Brain. With Automatic Visceral Ganglia. By Byron Robinson, B. S., M. D. Published by Frank S. Betz, Hammond, Ind. $3.50.

Significantly enough no date of publication is given, for this work stands for all time. Years ago the writer of these lines reviewed the author's smaller treatise on "The Abdominal Brain," and well does he recollect the continual surprise felt and admiration he then experienced for the immense industry of the author. In reviewing this larger work of the same author, the writer is not surprised but only gratified at the realization of what he expected from Byron Robinson as an original, exhaustive anatomist, physiologist, pathologist, and gynecological practician. The book is a thesaurus for study, reference and consultation when any abdominal or pelvic organ is in hand for treatment. The illustrations of the book illustrate and instruct along with the lucid, terse words of the text.

WITTHAUS'S "CHEMISTRY AND TOXICOLOGY"

Essentials of Chemistry and Toxicology, for the Use of Students in Medicine. By R. A. Witthaus, M. D. Thirteenth edition. By R. J. E. Scott, M. D. New York: William Wood & Company. 1907. $1.00.

This last edition may be relied upon as containing the latest points of these sciences to date upon which a student may have to be examined.

CONDENSED · QUERIES · ANSWERED

PLEASE NOTE

While the editors make replies to these queries as they are able, they are very far from wishing to monopolize the stage and would be pleased to hear from any reader who can furnish further and better information. Moreover, we would urge those seeking advice to report the results, whether good or bad. In all cases please give the number of the query when writing anything concerning it. Positively no attention paid to anonymous letters.

ANSWERS TO QUERIES

ANSWER TO QUERY 5261.—In September CLINICAL MEDICINE, page 1177, Dr. Chas. A. Bailey states in reply to query 5261 were he in Chicago and wished to see the effects of the new anesthetic he would see Dr. Abbott, or near St. Louis he would call on Dr. Lanphear. For rectal diseases if he were near Philadelphia he would see Dr. Albright. By reading CLINICAL MEDICINE we know all about the new anesthetic without seeing Drs. Abbott and Lanphear and by reading the *General Practitioner* as a specialist and office practitioner we can learn of the treatment of Dr. Albright for rectal diseases, but, what is Dr. Frederick Mueller's treatment for arthritis? Probably there are more readers of CLINICAL MEDICINE who would like to know.

J. WM. TRABERT.

Lebanon, Pa.

—

ANSWER TO QUERY 5275.—R. W. B. of Missouri wants help for malaria. If he will use the following prescription the work will be done. Have been trying this for more than thirty years and it scarcely ever fails:

Quinine sulphate .....grs. 84
Nitric acid.....dr. 1-2
Fl. ext. nux vomica .....min. 40
Water .....oz. 1
Simple elixir, q. s. ad. .....ozs. 10

M. Sig.: Teaspoonful in water every two hours until four or five doses are taken. Let the last dose come at least two or three hours before the expected chill. After the chills stop give three doses every seventh day for four weeks or more. I scarcely ever give anything else but this, sometimes varying it to suit cases.

J. T. KIMSEY.

Lathrop, Mo.

—:o:—

We have no doubt that this is an effective combination, but we very much suspect that the doctor's patients do not especially love it. Bitter? My!—ED.

—

ANSWER TO QUERY 5301.—In reply to query 5301, September, 1907, THE AMERICAN JOURNAL OF CLINICAL MEDICINE, I will say that in my opinion the following will cure more cases of asthma than any other drug or compound:

Fld. ext. amphiachyris dracunculoides.....oz. 1 1-2
Fld. ext. berberis aquifolium...oz. 1
Fld. ext. stillingia sylvatica...drs. 4
Fld. ext. polemonium reptans drs. 4
Fld. ext. lobelia inflata.....drs. 4
Simple syrup or glycerin q. s. ozs. 26

Sig: Dose one-half to one teaspoonful every two, three or four hours.

Pulverized lobelia inflata....oz. 1
Goose oil .....ozs. 26

M. Sig. Simmer over a fire, being careful not to get it more than blood heat for half

an hour or longer, then filter and apply small quantities over the breast with a flannel cloth. The cloth can be covered with gutta-percha tissue when the paroxysms come on. J. A.

Auburn, Ark.

—:o:—

There are almost too many remedies in this to suit me. I cannot see how any one case of asthma could require the relaxation of lobelin and the toning of berberine at the same time, though I will admit that some cases do require relaxation while others require toning. Too much polypharmacy. Doctor.—Ed.

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Answer to Query 5301.—In your reply to query 5301 you say "there is no such thing" as a "cure" for asthma. I agree with you. After twenty years' work directed to this condition and chronic rheumatism (socalled) I have come to the conclusion that we have been astray in our treatment by internal medication. Asthma can be cured, but only when the patient is under the observation of the physician the entire time. It takes about eight months for infallible results, but you get them, certain. My method is not safe in the hands of an uninstructed practitioner, but any sensible man can be taught. C. R.

New York.

—:o:—

We have asked the doctor to give us the method by which he is able to secure "infallible results" in the treatment of asthma. Let every one who has ideas that are of value to the "family" speak right out. No holding back of essential facts in these columns.—Ed.

QUERIES

Query 5305.—"Neglected Syphilis." W. D. J. ,Ohio, reports the case of a young man, 26 years old, who contracted syphilis ten months ago, treatment being neglected. He is of tubercular family. He has an extensive eruption, partial loss of voice, sloughing of uvula and tonsils, mucous patches in mouth, erosion of vocal cords, etc. This case we consider a very serious one and one that deserves careful physical study in order to secure perfectly satisfactory results. The "antisyphilitic" formula, containing mercury biniodide, arsenic iodide, iodoform and phytolaccin, should of course be pushed together with stillingin and nuclein, and the sulphur compound granule may also be given to full effect, say, four after meals. The skin must be kept active, the bowel washed out with normal saline solution, and orthoform emulsion might be sprayed into the throat and ungt. hydrargyri rubbed in externally, but as you know, treatment in a case of this kind to be of any avail must be based upon a complete and rational conception of pathological conditions.

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Query 5306.—"Cardiac Hypertrophy." W. O. J., Korea, asks for advice in the treatment of a case of hypertrophy of the heart in a young man 28 years of age. Assuming that the condition is one of true hypertrophy at present the remedy most assuredly is veratrine, which should be given in small doses largely diluted until the vascular tension is so far reduced as to allow of cardiac irritability, and restrain the heart-action within proper limits. This requires also a free and open bowel, proper regulation of the diet and the habits, and possibly the avoidance of all unnecessary exercise. If the disease be a consequence of valvular imperfection, as seems probable, it will be wise to restrict closely the amount of fluids ingested in order to reduce the bulk of the blood and avoid unnecessary work. These two conditions met—that is, vascular tension relaxed and unneeded water abstracted from the blood, the hypertrophy should subside instead of increasing, and when the natural equilibrium has been secured, the patient may go on indefinitely—even to the full expectancy of life, without serious discomfort. Nevertheless his limitations as to work, diet, etc., must be thoroughly comprehended and respected, if such a result is to be had. If, as is possible, the hypertrophy has

resulted in degeneration with hyperplasia of connective tissues and loss of muscular fiber, it may be that veratrine will not be well borne. In these cases it is probable that cactin will nicely fill the intermediate space before the period for giving digitalin has arrived.

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QUERY 5307.—"Non-tubercular Phthisis." C. J. S., Iowa, sends us a sample of sputum from a boy suffering from some lung trouble, with request for diagnosis. Tubercle bacilli were not detected, but there is infection by diplococci and the presence of pus indicates the destruction of pulmonary structure. It is a mighty good field for any wandering brood of tubercle bacilli to move in and set up housekeeping. In regard to treatment I would advise something like the following: Flush the alimentary canal with a morning dose of saline laxative and disinfect it with seven tablets daily of calcium sulphocarbolate, five grains each. Saturate this man with calcium sulphide and sustain saturation for two weeks, adding also arsenic sulphide and iodide, a tablet of each four times a day. Locally I should feel like washing out the abscess cavity with some powerful antiseptic like Villatte's solution, or else after washing it with any ordinary antiseptic solution inject into it cuarol, repeating three times a week. On the approach of cold weather send the boy into the mountains.

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QUERY 5308.—"Morphine Habit"—"Local Anesthetic." C. A. P., Massachusetts, asks concerning the nature and value of avenin, and its value in treating the morphine habit, also about desirable local anesthetics. Avenin is a glucoside obtained in very minute quantities from green oats. We do not believe that it or the other preparations of avenin have any special value in the opium habit, although they are useful when indicated. If you will turn to Dr. Waugh's article in the August number of CLINICAL MEDICINE you will find the views deduced from our many years' experience and study with the drug habits.

We have been advising that a combination of cocaine and brucine is better for local anesthesia than the former alone, brucine preventing the collapse which occasionally follows the use of cocaine while it equals the latter in local anesthetic power. Try it, Doctor.

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QUERY 5309.—"Alkaloidal Literature." C. W. M., Minn., desires to know what is the best literature in which to become familiar with alkaloidal and active-principle ideas. The best condensed therapeutics will be found in "Abbott's Alkaloidal Digest," and "Shaller's Guide"; but the two great works which contain the whole of these matters are our "Practice and Alkaloidal Therapeutics." I firmly believe that every chapter of these books contains material which, to aid the practice of the physician, is far more valuable than any other similar works published. Each book is a library in itself, representing many years of labor searching through hundreds of works in order that nothing of value should be omitted.

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QUERY 5310.—"Action of Sparteine." We are asked by E. L. S., of Florida, to explain the seeming contradiction between THE AMERICAN JOURNAL OF CLINICAL MEDICINE'S statement (July, 1907, page 877-8) that "sparteine *increases* blood pressure" and that of Abbott's "*Prices Current*" (August, 1906, page 34) saying "sparteine *lowers* pressure."

The article appearing on page 877 AMERICAN JOURNAL OF CLINICAL MEDICINE is contributed and the author here takes advantage of *one* of the effects of the drug, recommending the full dose, which first increases but later decreases the heart's force and rate, similarly increasing early and later depressing blood-pressure. Very large doses of sparteine are now being recommended in anuria by some physicians, though, as a matter of fact, scoparin is the diuretic active principle of broom. Arterial tension is raised for four or five hours after a full dose. Depression follows. Sparteine may be given as a cardiac tonic where digitalin is administered. It is not as useful, however, as cactin in tobacco-heart or in inorganic cardiac disorders. Sparteine acts as a diuretic

by increasing vascular tension. We would refer those interested for further data relative to sparteine and its action to Waugh-Abbott's "Alkaloidal Therapeutics" where the subject is treated in detail.

In making a study of the drug one is astonished at the various opinions expressed by prominent writers. Several articles have recently appeared in THE AMERICAN JOURNAL OF CLINICAL MEDICINE, one by Petty, calling attention to the action of sparteine as "toning the heart without causing rigidity of the arteries." Therefore it is an ideal diuretic in *certain conditions*. If we have a strengthened heart and relaxed arteries (decreased tension) we have lowered blood-pressure but an augmented current. Therefore we are inclined to stand by the statement in the price-list.

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QUERY 5311.—"Smallpox, Cuban Itch, or Impetigo Contagiosa?" H. C., of West Virginia, in a recent letter says: "I should like to have the opinion of the readers of CLINICAL MEDICINE on the eruptive skin disease that is prevalent in our country. Opinion among the physicians here is divided. Some call it smallpox, some pemphigus contagiosus. Who is right? Please name it. The disease is epidemic and in a very mild form the onset is more or less gradual, malaise and general weakness followed by headache pain in the back, with chill and chilliness, anorexia, disordered digestion with a fever between 100° and 103°F. These symptoms continue about two to five days, when the eruption spreads, first on the forehead, nose, face and cheeks, and then over the body, even on the palms of the hand and soles of the feet. The eruption appears in crops for several days and is about the size of a split pea. The papule soon becomes a pustule, the base being more or less indurated. The eruption lasts from five to ten days, the scabs drop off, leaving a redness which gradually disappears, with little or no pitting. The temperature is practically normal after the eruption appears. The appetite soon returns, the patient can go around and says he feels well. I know of a patient who walked five miles after the eruption appeared and would have gone to work had he not been stopped by the health officer. The disease doesn't seem to be very contagious. Out of two hundred exposures only five cases so far have taken, and it has so far been confined to children, but recently I learned that two young men have the disease."

Of course it is plainly impossible for us at a distance to express an opinion (that is, a definite one) as to the nature of the disease described. A modified form of smallpox has visited different states during the past three years and been reported as Cuban itch, Phillipine pox, etc. In one instance it proved to be chickenpox—pure and simple; in three other instances it was smallpox, without any question, but several lives were lost before the authorities were able to make people realize that fact.

The absence of temperature is a peculiar feature here, but the headache, malaise, etc., are suspicious; the pain in back, chills, and so forth, would also tend to prove the epidemic to be one of *modified* variola. On the other hand, the fact that children are chiefly affected and the limiting of the eruption to face and extremities looks like impetigo contagiosa. The crops and split-pea size of the vesicopustules are also fair arguments in favor of the latter malady, which affects children, is contagious, prevails in the warm months as a rule, and affects the face and extremities. The reddish base which the writer says is left after the scab falls is characteristic of impetigo contagiosa. In ordinary cases we have first digestive disturbances, then the appearance of the bullæ, surrounded by a well-defined halo which soon fades. If the covering is not broken the contents of the vesicle dry up and a straw-colored scab detached at edges, is noted. This looks as though "stuck on;" underneath is an erythematous area which fades after a few days. The lesions are discrete. The staphylococcus aureus is supposedly the invading bacterium. Pemphigus contagiosus affects adults mostly; and the extremities chiefly; it is not known to be directly contagious. Relapses are common, a chronic course being infrequently noted,

and yearly recurrences not at all rare. The bullæ here are tense and usually have no areola springing up from the sound skin.

The disease resists treatment stubbornly and the prognosis is not good. From experience we would suggest in these cases to wash with carbenzol soap, removing crusts. Apply carbenzol (pure) freely and saturate patient with calcium sulphide after cleaning out the primæ viæ thoroughly in the usual way. The sulphocarbolates and arsenates are also indicated. Creolinated epsom salt solution, 1:30, adding 10 minims of creolin to the pint, will also prove a useful application. Bullæ may be pricked and touched with pure carbolic acid, then with alcohol. If patients are treated thoroughly along these lines and kept from running at large from first sign of eruption till skin is clean, an epidermic will soon be stayed. If however variola has to be dealt with, too rigorous quarantine cannot be established. The doctor should have a microscopical examination of contents of pustules made and treat a case or two as suggested. It might be well also to try innoculation and watch results. Perhaps some of the "family" have noted similar epidemics and can give us light? We are personally inclined to look upon the disease described as impetigo contagiosa, but it would be unsafe to make a definite statement.

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QUERY 5312:—"American Negro Requires Larger Doses?" D. L. P., of Alabama writes that he was called to see a negro woman who was suffering with some uterine trouble which caused severe pain so as to produce lockjaw (at least she could not speak or use her mouth for anything). Her husband came for the doctor and stated that she had been in this condition all the previous night. About 9 a. m. the doctor injected one H-M-C tablet and left her; about 4 p. m. her husband reported that she was talking but could use her mouth but little; next morning he called to say that she was all right. She has remained so since then, about six days.

In this case a very moderate dose of H-M-C seems to have sufficed. Other reports would lead to us suppose the negro tolerated hyoscine and morphine easily, demanding very full doses. The same applies to purgatives. We should very much like to have an exhaustive article from some one in a position to test the action of ordinarily used drugs upon the American negro. The writer practised for some time in Georgia and found it necessary to exhibit almost double doses of such drugs as podophyllin, leptandrin, euonymin, quinine, etc., and has frequently exhibited ergot and ergotin in almost toxic doses before noting physiological effect. We are not in any way investigating the *character* of the American negro but his constitution, his tolerance for drugs. The Americanized negro is not so likely to suffer from debility and nervous diseases as the white. He is still more robust—nearer to nature, but we must bear in mind that owing to unfortunate circumstances in the past it is impossible to regard any six negroes as possessing the same physical characteristics, as in the six, we may get anything from the pure-blooded African to the negro whose only sign of negro blood is to be found after close examination of the nails and eyes—and who knows what vicious strains of blood have intermingled in such an individual? "If you have anything definite to advance upon the action of any drug or anything necessary as regards the treatment of the American negro," the editor wrote him, "we shall be more than pleased to have your views."

To this our correspondent replied as follows:

"I have nothing to advance regarding the peculiar action of H-M-C and similar products on the Americanized negro. There is something peculiar in the constitution of the race in reference to the action of medicine generally. So far as my knowledge extends they are more susceptible to treatment than the white man; that is, they will recuperate quicker under similar conditions with less care and treatment. I think this action must depend upon their passive nature under compulsory influences. The white man has a more highly organized nervous structure and determined native force in him. I was born among them

and the Indians of this section, grew up among the negroes, was handled by a black nurse, and for nearly seventy years have been learning their traits of character, and cannot refrain from saying that I know but little about them yet. Something new crops out among them almost daily."

Now will other members of the "family" practising among the negroes give their experiences?

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QUERY 5313:—"Case of Hystero-Toxemia. Dr. B. M., of South Carolina, writes: "I have been practising medicine forty years, most of the time in the country, remote from any reliable help when I needed it, so I have got to rely upon my own judgment and have had some trying experiences. But I met a case a few days ago that "stumped" me. A cotton-mill hand —young woman, about 22 years old— presented a history something like this: Some nine years ago she had, while working on a farm, something like diphtheria, from which she came out with general impairment of all functions. She was subject to what her mother called "fits," and had been since she came unwell and got wet when about 12 years of age. Three or four years prior to the attack of diphtheria a chronic, foul, discharging leg-ulcer appeared, one also on forearm, both leaving ugly scars. She was subject to repeated attacks of something like erysipelas on the limbs and it was for this condition I first saw her last week. The left forearm was very red and swollen up to elbow, but the most curious feature in the case was the condition of the integuments, involving left shoulder, axilla and mamma. While she is very thin, poorly nourished, the breast was swollen tight, much larger than the other; and the whole area above mentioned slightly puffed, but no redness at all, but the entire space, well defined in extent, covered with what appeared to be powdered indigo. Her clothing was darkly stained from coming in contact with it. Calling for a wet towel, I wiped off a space about the size of a dollar. The skin underneath was normal in appearance and the towel stained with the pigment, for it was easily removed with the wet cloth. Much puzzled, I asked her mother if she had ever been that way before. "Oh yes," said she, "many times; and whenever she has this blue stain that limb or whatever portion of the body it would appear on, would afterwards become drawn and stiff."

I did not see her again for a week. Found left leg and arm drawn tightly—inmovable, fixed to her body. The stained area had changed to a bronzed appearance. She could only lie on the unaffected side, moaning, and seemed to be suffering. When asked where, she put her hand over left ovary (the menstrual function has been deranged more or less, sometimes profuse, last week merely "a little yellow water") her pulse and temperature were *normal*, tongue but slightly coated, bowels constipated, and anuria existed, attendants claiming she had no action from bowels or bladder for four days [?]. There was no smell of urine about the bed or clothing, and may be they were telling me the truth.

The rigidity of arm and leg is due, I think, to an hysterical condition; (can catalepsy affect one-half the body.)—[No! —ED.] Another symptom mentioned was, that when the ulcers mentioned were discharging "the discharge was exactly the color of paris green." They worked in tobacco and were familiar with paris green. Now it is the pigmented condition that puzzles me. I wrote to the physician who had her under treatment, he candidly confessed he did not know what was the trouble remarking, "now, would she not be a curiosity before a hospital clinic?"

A man in your position does have "trying experiences" but these make a better man of him. He, like "refined gold tried by fire," increases in value to himself and others.

In the case so well described two things—or even three—must be thought of. Drug or die poisoning (arsenic?), systemic sepsis from absorption of pus) and hysteria; more or less disorder of the pelvic organs undoubtedly exists. Just *what* the con-

dition is, should be discovered. We have here an anemic, hysterical female seized with diphtheria in early sexual life. She is not only left in a thoroughly weakened physical condition but there is more or less mental "let down." It is useless to try and speculate as to the nature of the ulcer though careful examination of the pus might reveal something. From this very site true erysipelas might easily develop but we must also remember the possibility of trophoneurosis. Now, run down physically and somewhat effected mentally, it is easy to imagine a hysterical woman coloring the breast and feigning anuria and obstipation. Both these conditions may, however, exist in hysteria to quite a marked degree. The condition of the hand and arm described by you would appear hysterical, and then the other hysterical zones—breast and ovary—received attention from the patient. The peculiar facts are that the temperature remains normal and pulse regular and, throughout all this train of awful symptoms, the tongue remains clean or nearly so. We should wash the breast with water and alcohol and have the resultant fluid examined by a competent chemist. Some of the "green pus" should be sent to our laboratory. The doctor should believe little but observe everything and constitute himself a sleuth in this case. On no account should he give any weight to statements of ignorant and sympathizing friends and if the patient dwells upon one thing he should direct his attention along the exactly opposite line.

Our therapeutic suggestions are to relieve constipation with aloin, atropine and cascara compound, one or two at night, saline laxatives in the morning, to give calcium sulphide, gr. 1-6, every two hours, helenin and viburnin aa. gr. 1-12, dioscorein gr. 1-6, gelsemin gr. 1-250, avenin and scutellarin aa. gr. 1-6, morning, noon and night with sanguiferrin one dram and strychnine phos. gr. 1-67 at meals. Twice a week wash out the vagina with two quarts of very hot water in which dissolve a teaspoonful of vaginal antiseptic powder. Cleanse the sore with H_2O_2, apply pure oil of turpentine on gauze and later, when granulations appear, dress with iodoform gauze soaked with sanguiferrin. Later on there is no question as to the indication for the triple valerianates and scutellarin.

Later reports prove our ideas to have been correct. The young woman after being *in articulo mortis* recovered entirely.

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QUERY 5314.—"Freckles and Boils." L. F., Illinois, is desirous of knowing how to remove the "disfiguring freckles" which appear upon the face—especially of young women—during the hot months. He would also like to be informed how we treat children who present many small boils. "Styes" also cause him trouble and refuse to yield to treatment.

The "disfiguring freckle," as a matter of fact, does not "disfigure" unless in great abundance. Many "mere males" delight in looking at a pert little freckle upon the nose or cheek of the right young woman. And anethema on the doctor would who aid and abet in its removal! However, too many freckles or freckles in the wrong place will often cause their possessor desquiet and lead her to seek assistance. The most simple remedy of all is pure lemon juice—a drop applied with a camelshair brush two or three times daily. A strong solution of calx iodata (grs. 10 to the dram of water) applied night and morning will remove freckles in a few days. Obstinate specimens may require a solution of mercury bichloride, grs. 2 to the ounce of alcohol. A little piece of lint may be soaked in this and left sticking to the skin till it falls. At night the skin should be thoroughly washed with carbenzol—or sulphur soap. Finally, zinc sulphocarbolate—grs. 5, alcohol, dr. 1-2, collodion, oz. 1—may be applied at night with a brush. Two to three such applications settle the freckle.

"Boils," when they appear in crops upon a child, are usually considered evidence of serious systemic disorder. However, the staphylococcus may infect the most healthy individual, access being gained through some scratch. The hair follicles, or glands, are, as a rule, the sites of furuncles. That

certain constitutional dyscrasias predispose to pus formation cannot be denied, rickety children are especially prone to the disorder. The treatment is local and constitutional. Iridin and calomel, gr. 1-6 of each, may be given every half-hour from six to eight p. m., every other night for a week, and a saline laxative draught next morning, at night the whole body should be well sponged with a carbolated solution of magnesium sulphate, one ounce to the quart, to which 10 drops of carbolic acid may be added. Between meals, alnuin, gr. 1-6, rumicin, gr. 1-6, echinacea, gr. 1-3, and after food one to three sulphur laxative granules.

After a week drop the latter and exhibit the triple arsenates with nuclein—one to two tablets according to age. The diet must be light but nutritious. Early—before the boil has pointed—wash with a little ethereal tincture of soap, dry, and paint with pure carbolic acid; in ten seconds with alcohol, then apply a piece of lint soaked in carbenzol. If pointing has occurred, touch with carbolic acid and open, evacuating the pus; inject a drop or two of peroxide of hydrogen, dry, and apply a little dermal antiseptic powder. Boils in the early stage may be treated with a 1:500 solution of pyoktannin blue: this destroys the staphylococcus promptly. The stain may be removed with diluted hydrochloric acid or alcohol.

"Styes" require the same constitutional treatment and the application early of unguentum oxidi hydrargyri flavi—gr. 1 to the ounce. If pus has formed, hot fomentations are the best thing to use; as soon as the swelling points, open and evacuate the pus with a Baer or Graef knife. The injection of half a drop of carbolic acid into the apex of the swelling with a very fine hypodermic needle would abort the process but the procedure is dangerous and needs to be very carefully carried out. Children who constantly have styes require the arsenates twice daily after meals for weeks.

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Query 5315.—"Tobacco Habit." M. A. C., Illinois, asks us to give an outline of treatment for the tobacco habit.

We have already, on several occasions, outlined what we think the most rational method. The patient must *desire* to be cured and have enough moral courage to help his doctor cure him. He is cleaned up and the *primæ viæ* are *kept* clean, and before each meal hydrastin, gr. 1-6; strychnine nitrate, gr. 1-67; cactin, gr. 1-67; is exhibited, and after meals, two of the papayotin compound granules. The man is given something to chew —gentian root, gum, or any harmless substance, and small but repeated doses of hyoscyamine or atropine valerianate, just enough to keep the mouth slightly dry. Should nervousness be marked, passiflora incarnata and avenin are pushed "to effect." Each patient will demand somewhat different medication. The main features are, however, the instant withdrawal of the tobacco, the thorough cleansing of the intestinal tract, the exhibition of bitter tonics, and atropine or hyoscyamine to "effect." There are all sorts of alleged "tobacco cures" some of which are farcical, some injurious and some more or less useful, but after a thorough investigation of the subject we are quite convinced nothing can beat the method here outlined.

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Query 5316.—"Cure for Pinworms." S. H. B., of Ohio, desires the "best anthelmintic for pinworms of the rectum."

We do not believe that any medicine exhibited internally will prove thoroughly satisfactory for pinworms. The best remedy known to us is an infusion of quassia injected per rectum, or a teaspoonful of cider vinegar may be added to a pint of water and thrown into the lower bowel. To make the quassia infusion, add two teaspoonfuls of fluid extract of quassia to one-half pint of warm water. Inject at bedtime every night for three nights and let it be retained five to fifteen minutes. Or make a suppository of santonin, 15 grains; tannic acid, one dram; cocao butter, 3 drams; and insert at night. One of the triple arsenates tablets may be given after meals as an alterative tonic and quassin, gr. 1-6; and hydrastin, gr. 1-6; half an hour before meals. The patient must be warned against reinfecting himself.

EPILEPSY.—Study your case thoroughly and prescribe only on the totality of the symptoms.—W. E. Reily, *Clinical Reporter.*

OPSONINS.—Private advices from competent observers indicate that the opsonins as tested in practice do not give satisfactory results.

WE believe the statement that most physicians are incompetent has received the unanimous endorsement of the journals of pharmacy.

YEAST.—Rhames (*La Tribune Med.*) praises yeast as a remedy for eczema. It might be well to give a trial to its active principle, nuclein.

ETHER IN NEPHRITIS.—Ether is contraindicated in nephritis, in disease of the lungs, and in arteriosclerosis.—H. Hawkins, *Southern Practitioner.*

GOOD ARTICLE.—In *The Chicago Clinic and Pure Water Journal* for July there is an article by an old doctor so good that you should send for and study it.

YELLOW-FEVER.—In *The Lancet Clinic* for June 29 appears an interesting paper by Kohnke on yellow-fever and mosquitoes in New Orleans in 1905.

RETENTION OF URINE is capable in itself of exciting cystitis, but catheter infection is its most prolific source.—W. R. Kone, *Texas Med. Journal.*

SEASICKNESS.—Before taking a lake trip the use of a saline cathartic and then bromide of potassium will sometimes do good.—*Central States Medical Monitor.*

CONSTIPATION AND INDICAN.—Whenever constipation is of some days' duration or chronic, there is an excess of indican in the urine.—*La Tribune Medicale.*

INFANTILE SCURVY.—Broca (*La Tribune Med.*) gave the citrus fruits in a case of infantile scurvy or Barlow's disease, and says. "The results were marvelous."

COCAINE RESTRICTIONS.—The New York City Health Department is enforcing its rule restricting the sale of cocaine to physicians' prescriptions.—*American Druggist.*

PROPRIETARIES.—A proprietary medicine is an article which any person or firm has the exclusive right to manufacture or sell.—*New York State Journal of Medicine.*

DISPENSING.—When will druggists and drug writers begin to learn that they are to blame for much of the dispensing that is being done by physicians?—*Physicians' Drug News.*

LEGISLATIVE "PROGRESS."—When physicians have been forbidden by law to dispense their drugs, the next and easy step will be a law restricting them to the U. S. P. preparations.

AROUND THE WORLD.—Dr. and Mrs. R. G. Eccles have returned from their trip around the world, in fine health and rejoicing in the wealth of varied remembrances of a delightful time.

GASTROINTESTINAL INTOXICATION and an inactive liver were wholly responsible for a sciatic neuritis with which I suffered for nine months.—L. E. Cox, *Central States Medical Monitor.*

GOOD SENSE!—It is foolish to endeavor to work with the medical profession, increasing the prescription use of U. S. P. and N. F. preparations and work against it as to legislation.—*The Apothecary.*

INCREASE OF SALES.—We note with interest that since the damaging announcement of the incompatibility of compound digestive principles in fluid menstruums, the demand for these has materially increased.

ADVERTISING.—*The Chicago Clinic* calls attention to the wide door opened by the perilous suggestion made by the late president of the Illinois State Medical Society, that physicians should advertise to the laity.

PUERPERAL INFECTION.—The medical profession stands today self-condemned of gross criminal negligence, and responsible for a large percent of the deaths from puerperal infection.—G. A. Biddle, *Jour. Kas. Med. Society.*

PRESCRIPTIONS NOT EXEMPT.—In the State of Washington physicians' prescriptions are not exempted from the law requiring the statement of percentages of alcohol, morphine and cocaine they contain.—*National Druggist.*

MORPHINE OR H-M-C?—In the instructions given to the Russian surgeons during the late war was one instructing them to inject morphine before the wounded man was placed in ambulance for transport to the hospital. Here is an opportunity for the hyoscine, morphine and cactin combination where its superiority would be manifest.

CATARACT.—For traumatic cataract Libby (*Denver Med. Times*) advises instillation of atropine solution, exclusion of light, quiet, good hygiene, and dionine instillations to relieve the pain. Perilous tension demands extraction.

EPILEPSY.—If we really want to help our epileptics we must regulate their way of living, individualize them for study and treatment, and, in fine, regard their lot with a greater degree of significance.—Marrs, *Med. Times.*

CRITICISM OF N. F.—Though physicians are asked to make the National Formulary their Bible, pharmacists may yet criticise it; and this privilege G. M. Beringer avails himself of with a vengeance in the *American Druggist* for June 24.

PILOCARPINE.—Freundlich confirms Robinson's suggestion as to the use of pilocarpine as an adjuvant in the treatment of syphilis, and calls attention to the fact that this remedy, like mercury, stimulates the flow of saliva.—*Medical Record.*

INDEX MEDICUS.—The *Nashville Journal* says that the profession has not come to the support of the Index Medicus as was hoped when the price was reduced to $5.00 per annum. Possibly to most doctors the cash seems more useful than the journal.

LOW PHYSICAL STANDARD.—In Baden, out of 604 youths summoned for military service, only 20 were found up to the required physical standard. The cause ascribed was the dearness of meat and the monopoly of milk by the cheese factories.—*Med. Times.*

CHLOROFORM is a capricious drug, death occurring suddenly from paralysis of the heart, sometimes at the beginning of its administration, and no guide to its effect can be deduced from past anesthesias in the same individual.—H. Hawkins, *Southern Practitioner.*

"BOOK" DOCTORS.—There is, except perhaps in Balzac, an unreal quality in all the doctors of the books, because the lay writers see only the exterior of the doctor.—*The Chironian.* Are you quite sure you care to have the laity see us as we really and truly are?

THE NOSTRUM EVIL, a monster in every detail, form and function, dealing in disease, distress and death; the everlasting curse upon us as a nation, producing hundreds of morphine, cocaine and alcoholic inebriates yearly.—G. L. Bates, *Vermont Medical Monthly.*

INSURANCE.—*The Journal of the South Carolina Medical Association* proves by correspondence printed that the Penn Mutual Life Insurance Company forgot its facts when it claimed to pay at least five dollars for each examination where the urine test was included.

RUBBER TUBE FOR PERCUSSION.—A physician in California, perhaps for want of something else to say, has burst into print advocating the use of a rubber tube in percussion. There is no reason why a man shouldn't percuss with a rubber tube if he wants to, or with a bootjack or a piece of Limburger cheese; but we have tried the rubber tube on a kind and long-suffering patient and personally would prefer a wet dish-towel.—*Chicago Clinic.*

GONORRHEA.—Eighty percent of blindness, and 70 percent of abdominal pelvic operations, are due to gonorrhea, from which 90 percent of men suffer at some time, and 85 percent of cases occurring in married women are contracted innocently from their husbands.—Bransford Lewis.

A HARD LOT!—Surely the lot of the retail pharmacist is hard. *The American Druggist* tells of one who invested $6000 in this business eleven years ago and has just retired with a clear profit of a quarter million, in addition to a proprietary that nets him ten thousand a year or more.

NEW FILIARIA.—Army surgeons in the Philippines have discovered a new filiaria (*The Military Surgeon*) in the blood of soldiers. Out of 57 examinations made of the feces of men on duty, 43 showed the entameba coli, 32 the trichomona intestinalis, and 14 some one of seven other parasites.

SCOPOLAMINE-MORPHINE.—Collins enumerates these advantages as accruing to scopolamine-morphine as preliminary to general anesthesia: Mental tranquillity and somnolence; sleep induction; less anesthetic required; dryness of the throat lessening peril of aspiration-pneumonia; sleep during period of postoperative suffering; less vomiting. The only disadvantage is the varying effects of the dose.—*Medical Record.*

LOCAL ANESTHESIA.—Fifty percent of all surgery can be done with local anesthesia. Weak cocaine solution is the best drug. Morphine must precede. Idiosyncrasies need not be considered. Have absolute confidence in yourself, the cocaine, technic and anatomic knowledge. Consider the patient's comfort at every point. Assistants must be careful and watchful and let the surgeon do the operating. —Paul De Witt, *Southern Practitioner.*

STATE BOARD JOURNAL.—A number of our readers have asked us for information concerning state board examination questions, i. e., where sample questions can be obtained. To such we would suggest a subscription to the *State Board Journal*, published at 93 Luckie St., Atlanta, Ga. The price is $1.00 a year It not only gives the questions asked at recent examinations, but all kinds of news of interest to those who may be compelled to take such examinations.

INTESTINAL AUTOTOXEMIA.—Forchheimer enumerates these evidences of chronic intestinal autotoxemia: Riggs' disease, various gastric maladies, functional inactivity of the colon, demonstrable fecal retention; the urine shows increase of indican and oxalates, uric acid and urates 25 percent, red corpuscles 30 percent, polyuria alternating with oliguria 33 percent; menstrual ails in women 50 percent; nervous symptoms; cardiovascular changes, neuroses and myocardial conditions; gouty joints and muscular symptoms; skin lesions.—*American Jour. Med. Science.*

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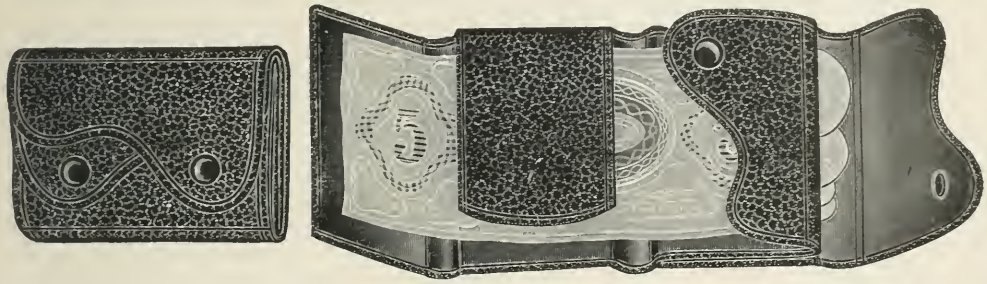

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